

# OLDFIELD, PATTINSON & CO.

WHOLESALE & EXPORT DRUGGISTS,  
17 TODD STREET, MANCHESTER.

Sole Proprietors and Manufacturers of the

## "Silver Churn" Butter Colouring,

*A purely Vegetable preparation for giving to Butter, at all seasons, a rich cowslip tint, not obtainable by other means. It is the best and cheapest preparation in the market, and does not crust or deposit like the Danish and American makes, and has the further advantage of being a Home Product. Druggists in the grazing districts will find this a very saleable line. It is sold in bottles attractively got up at*

6d. 1s. 2s. 5s. size  
4s. 8s. 16s. 38s. per dozen.

*less usual 10 per cent. discount. Buyers of £5 worth gross value, which may be assorted to suit their requirements, are put on full wholesale terms.*

*For large Dairies and Druggists who prefer to bottle it under their own name, it may be had in bulk, in 1, 2, and 4 gallon bottles, and 1, 3, and 5 cwt. casks, at special prices, which will be sent on application.*

## THE "SILVER CHURN" ESSENCE OF RENNET.

For the preparation of Devonshire Junkets, Curds and Whey, Cheese Cakes, &c.

This is always uniform in strength, and, as the above-mentioned dietary articles are growing in favour, will command a ready sale.

6d. size, 4s. per dozen; 1s. size, 8s. per dozen; 2s. size, 16s. per dozen.

TERMS AS ABOVE.

## THE "SILVER CHURN" CHEESE RENNET.

A highly concentrated preparation, introduced specially for large Dairies and Cheese Factories, one tablespoonful being sufficient to curdle Twenty-five Gallons of Milk.

Sold in  $\frac{1}{2}$ , 1, 2, 4 gallon bottles and 30-gallon casks, at special prices which may be had on application. The attention of Druggists in the Cheese Districts is particularly directed to this article.

## FLUID EXTRACT OF HERBS (Botanic Extract)

FOR MAKING HERB BEER.

This is a very superior preparation, and is meeting with great success, there being a growing demand for an article of this description during the Spring and Summer Months.

Price in 2-gallon bottles, 1s. per lb. Price bottled, 6d. size, 4s.; 1s. size, 8s.; 2s. size, 16s. per dozen.

Attractively put up with plain labels and metal capsules.

## CUCUMBER CREAM AND GLYCERINE.

1s. 2d. per lb.; 1s. in Winchester Quarts. Inseparable and delicately perfumed.

## APERIENT SUMMER SALINE.

1s. 4d. per lb.; 1s. 2d. in Pottle Bottles. Pleasantly flavoured and will not cake in the bottles.

## CONCENTRATED SOLUBLE ESSENCES.

Prepared specially for Cordials, Aërated Waters, &c., and will mix with Water or Syrup in any proportion without turning turbid

Essence of Capsicum ... 5s. per lb., 4s. 6d. in Wr. Qts.

„ English Hop 5s. „ 4s. 6d. „

„ Ginger ... 4s. „ 3s. 6d. „

„ Ginger Ale 4s. 6d. „ 4s. „

Essence of Horehound 3s. per lb. 2s. 6d. in Wr. Qts.

„ Lemon ... 3s. 6d. „ 3s. „

„ Orange ... 3s. 6d. „ 3s. „

Buyers of 12 Winchester Quarts and upwards are requested to write for a special price.

PRICE LIST WILL BE SENT ON APPLICATION WITH BUSINESS CARD.



NOTE REDUCED PRICES OF QUININE PILLS.

LIST OF "McK. & R." CAPSULE<sup>D</sup> PILLS  
OF THE BRITISH PHARMACOPŒIA AND OTHER STANDARD AUTHORITIES.

**McKESSON & ROBBINS,**  
WHOLESALE DRUGGISTS AND MANUFACTURING CHEMISTS,  
ESTAB. 1833.] NEW YORK, U. S. A. [ESTAB. 1833.

*Supplied by the Principal Wholesale Houses in the Trade throughout Great Britain and Ireland.*

The reputation of Gelatine-Coated Pills has been created by our manufacture.	DOZ. BOTTLES containing		Being completely sealed, all substances are perfectly preserved from oxidation.	DOZ. BOTTLES containing	
	25 PILLS.	100 PILLS.		25 PILLS.	100 PILLS.
Aloin .....	1/10 gr.	6/	16/	Quinine, Bisulphate.....	1/4 gr. 6/ 16/
" .....	1/8 gr.	6/	20/	" .....	1 gr. 6/ 16/
" .....	1/4 gr.	7/	24/	" .....	2 gr. 6/ 18/
" .....	1/2 gr.	11/	40/	" .....	3 gr. 7/8 28/
" Compound .....	7/	24/	24/	" .....	4 gr. 9/8 34/
" and Strychnine.....	7/	24/	24/	" .....	5 gr. 11/8 42/
" Strychnine and Belladonna .....	7/	24/	24/	" Sulphate .....	1/2 gr. 6/ 16/
" or Aperient, No. 1 (Clark).....	9/	32/	32/	" .....	1 gr. 6/ 16/
" " No. 2, No. 3, No. 4 .....	7/	24/	24/	" .....	2 gr. 6/ 20/
Morphine Muriate .....	1/8 gr.	7/	24/	" .....	3 gr. 8/ 28/
" .....	1/4 gr.	9/	32/	" .....	4 gr. 10/ 36/
Narcotic Extracts (Brown-Sequard) .....	15/	66/	66/	" .....	5 gr. 12/ 44/

A Complete List of Formulas and Prices will be mailed promptly on application.

*In ordering, be careful to specify "McK. & R." CAPSULED PILLS.*

Original d 1870, by McKESSON & ROBBINS, New York, U.S.A. Merchants, Shippers, and the Wholesale Houses in the Trade are supplied by Messrs. S. MAW, SON & THOMPSON, 7 to 13 Aldersgate Street, London, E.C.; Messrs. T. ROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.; and Messrs. HOCKIN, WILSON & CO., 38 Duke Street, Manchester Square, London, W

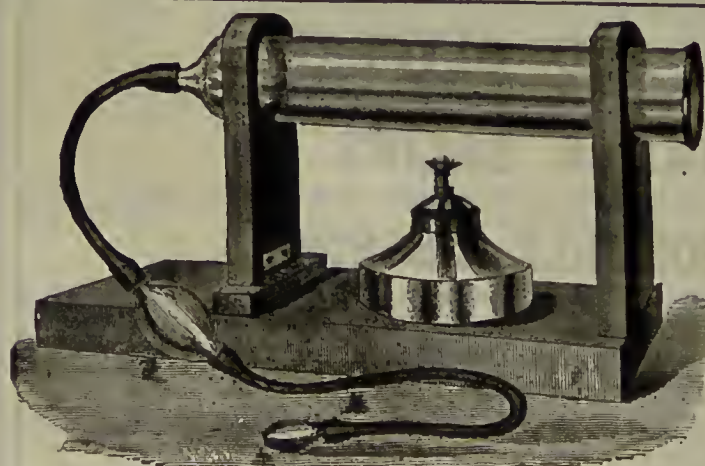
Telegrams—  
"LINT LIVERPOOL."

THE  
LIVERPOOL PATENT LINT CO.,  
MARK ST. MILLS,  
NETHERFIELD ROAD NORTH,  
LIVERPOOL.

**LINT.**

MANUFACTURERS OF

FLAX, & COTTON,  
**LINTS,**  
ABSORBENT, AND CARDED  
COTTON WOOLS,  
ABSORBENT, OPEN WHITE, and GREY  
BANDAGES,  
SURGEON'S, AND CARBOLIZED  
**TOW.**



**MAXWELL'S  
CHLORIDE OF AMMONIUM  
INHALER.**

The simplest Apparatus yet introduced to the profession.  
Requires no strong caustic or acid liquids.  
Fumes are invariably neutral.

*To be had of all Chemists and Sundriesmen, and of the Proprietors—*

**ANDERSON & ADAMS**  
68 GRAFTON STREET, DUBLIN.  
LYNCH & CO., London Agents.  
PATENT.





**S. MAW, SON & THOMPSON'S**



QUARTERLY  
**Price Current**



AND  
**BOOK OF ILLUSTRATIONS**  
OF  
**SURGEONS' INSTRUMENTS**  
AND  
**DRUGGISTS' SUNDRIES**  
OF ALL KINDS

MAY BE HAD ON APPLICATION ENCLOSING  
BUSINESS CARD.

Forwarded Post Free to all parts of the World.

**S. MAW, SON & THOMPSON, 7 to 12 ALDERSGATE STREET, LONDON, E.C.**

Published by J. & A. CHURCHILL.

**Lectures on Practical Pharmacy.** By BARNARD S. PROCTOR, formerly Lecturer on Pharmacy at the College of Medicine Newcastle-on-Tyne. Second Edition. With 44 Wood Engravings and 32 Lithograph Facsimile Prescriptions. 8vo., 14s.

**Veterinary Pharmacopoeia, including the Outlines of Materia Medica and Therapeutics.** By RICHARD V. TUSON, F.C.S., Professor of Chemistry, Materia Medica, and Toxicology at the Royal Veterinary College. Fourth Edition. Post 8vo., 7s. 6d.

NEW EDITIONS OF MR. CHAVASSE'S WORKS.

**Advice to a Mother on the Management of her Children,** and on the Treatment on the Moment of their more pressing Illnesses and Accidents. Fourteenth Edition (170th thousand), 2s. 6d.

**Advice to a Wife on the Management of her own Health,** and on the Treatment of some of the Complaints incidental to Pregnancy, Labour, and Suckling, with an Introductory Chapter especially addressed to a young wife. Thirteenth Edition (210th thousand), 2s. 6d. [2]

LONDON: 11 NEW BURLINGTON STREET.

Now Ready, Second Edition, Crown 8vo., price 5s.

## A PRACTICAL MANUAL OF VENEREAL AND GENERATIVE DISEASES:

Including SPERMATORRHOEA, PROSTATORRHOEA, IMPOTENCE, and STERILITY in Both Sexes.

By **M. K. HARGREAVES, M.D.**

Assistant Physician to St. John's Hospital for Diseases of the Skin.

LONDON: R. KIMPTON, 162 WARDOUR STREET, LONDON, W.

**LONDON HOMOEOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET, BLOOMSBURY, W.C.**

President—THE LORD EMBURY. Chairman—MAJOR WM. VAUGHAN MORGAN. Contains 99 Beds, and being entirely supported by Voluntary Contributions, Donations and Annual Subscriptions are earnestly solicited. The Hospital is always open to the inspection of visitors, and Clinical Instruction is given in the Wards and Out-patient Department to Medical Students and Practitioners. It possesses a valuable Library of Homoeopathic Publications, which Medical Men are invited to study. They are also invited to visit the Dispensary. The In-patients number over 700 annually; the Out-patients nearly 9,000 annually. The number of Patients treated since the inauguration in 1849 exceeds 215,000. It has a staff of 42 Nurses for Ward Nursing and Nursing Invalids at their residences.

G. A. CROSS, Secretary-Superintendent.

"CONCILIO ET LABORE."

## THE MANCHESTER COLLEGE OF PHARMACY,

225 & 227a OXFORD STREET, MANCHESTER.

At the December Examinations *Two* Students passed the Major and *Four* the Minor, viz.:—

Major—Mr. T. L. HOLLELY, Mr. H. H. GOURLAY.

Minor—Mr. G. L. GREENWOOD, Mr. WM. COOPER, Mr. F. SLEIGHT, Mr. G. L. WESTMACOTT.

In January Three Minor Students were successful, viz.:—

Mr. E. W. SLEATH, Mr. W. FURNESS, Mr. J. H. PARKER.

Full particulars of Mr. TURNER'S "Class System" will be sent on application.

## THE LIVERPOOL SCHOOL OF PHARMACY

Principal—Mr. J. S. WARD, Ph. Ch., F.C.S., &c.

### REMOVAL TO NEW PREMISES.

Mr. WARD has great pleasure in notifying that he has secured large airy, and well-lighted premises in the very centre of the city, viz., at the corner of Newington and of Renshaw Streets.

Being close to all the Railway Stations and to the Landing Stage, the School will be most conveniently situated for those who come in daily from the surrounding towns, and the size of the premises will enable the Principal to meet that increasing demand for Laboratory and Class-room accommodation which of late he has been unable to do satisfactorily.

The course of Full-time and Part-time Classes commenced on Monday January 6, in the New Premises.

Syllabus, Pass-lists, Testimonials, &c., sent free on application to the Principal, at 36 Oxford Street, Liverpool.



# NOTICE OF REMOVAL.

MESSRS. R. GIBSON & SONS, OF MANCHESTER,

Medicated and High-class Lozenge Manufacturers,

Have pleasure in calling the attention of their numerous Customers, in and out of London, to their having Removed from Australian Avenue to a Commodious Warehouse,

**1 GLASSHOUSE YARD, ALDERSGATE STREET, LONDON, E.C.**

Where a large and complete Stock of their varied Manufactures will be stored. London Buyers can either see Samples at the Warehouse, or have them submitted upon application. A call, however, is respectfully solicited.

**CARLTON WORKS, MANCHESTER.**

February, 1890.

**SPONGE IMPORTERS.**

**M. PETERSON & CO.**

(ESTABLISHED 1870),

**75 ST. ANNE STREET, LIVERPOOL.**

FOR HOME, FOREIGN, & COLONIAL MARKET

Third Edition (Illustrated), price 6s. 6d.

**M**UTER'S SHORT MANUAL OF  
ANALYTICAL CHEMISTRY.

"At once the cheapest and most complete laboratory guide for pharmaceutical students, containing, within 200 pages, everything they require to know, from the simplest testing to the most elaborate quantitative work."

London: SIMPKIN, MARSHALL & CO.,  
Stationers' Hall Court, E.C.

ESTABLISHED 1842.

**THE SCHOOL OF PHARMACY**

*Of the Pharmaceutical Society of Great Britain.*

Chemistry, Prof. DUNSTAN, M.A., &c.

Practical Chemistry, Prof. ATTFIELD, F.R.S., &c.

Botany, Prof. GREEN, B.Sc., &c.

Materia Medica, Mr. E. M. HOLMES, F.L.S.

Practical Pharmacy, Mr. JOSEPH INCE, F.C.S., &c.

**FORTY-EIGHTH SESSION, 1889-90.**

Application for admission to the School, for Prospectuses, or for further information or advice may be made to the Professors or their Assistants in the Lecture Room or Laboratories, 17 Bloomsbury Square, London, W.C.

AWARDED  
EIGHT

**NEO-CYCLOSTYLE**

PRIZE  
MEDALS.

(GESTETNER'S PATENTS.)

The simplest and most reliable apparatus for Printing Copies of Writings, Drawings, &c. 2,000 Copies can be taken from one original, in PERMANENT BLACK INK. No gelatine, aniline ink, washing, sticky copies, and no file or laborious writing.

**THE NEO-CYCLOSTYLE PEN (IMPROVED PATENT) WRITES AS EASY AS AN ORDINARY PEN.**

Invaluable to Chemists for Printing Counter Bills, &c.

Prices from 25s. to 42s. complete.

Mr. A. W. SMITH, Chemist, Pershore, wrote, August 23, 1889:—"I have found your 'Cyclostyle' invaluable. It has saved me many hours' labour, and not a little expense."

Apply for Specimens of Work and Descriptive List to

**THE CYCLOSTYLE CO., 79a Gracechurch Street, LONDON, E.C.**

PRIZE MEDAL, PARIS EXHIBITION, 1889.

**ZUCCATO'S PATENT  
1 TYPOGRAPH**

**PRINT YOUR OWN  
NOTICES,  
Circulars, Price Lists, &c.**

NEW MODEL, 1888.

**SIMPLE, CLEANLY, RELIABLE, CHEAP.**

PAYS FOR ITSELF AFTER A FEW TIMES USING.

5,000 Copies can be produced from one writing. Is invaluable to Chemists and Druggists for the rapid production of Price Lists, Circulars, &c. &c. Full particulars, with specimens of work, Testimonials, &c., on application to the Manufacturers and Patentees—

**ZUCCATO & WOLFF, 12 Charterhouse Street, London, E.C.**



# A Safe and Reliable Soporific.

DR. KINGSBURY (*British Medical Journal*, Oct. 12th, 1889) calls attention to "one special virtue of Sulphonal, which is that it can easily be administered without the knowledge of the patient, which cannot be said of bromides, hyoscyamine, &c. Recently I was able to keep a violent lunatic in a



perfectly tranquil condition for three days by the simple addition of Sulphonal to the patient's tea morning and afternoon, and coffee at bedtime, and without the slightest suspicion on the part of the invalid. In the insomnia of locomotor ataxia I have also had good results from Sulphonal."

Dr. Charles Macdowell, Carlow and Kildare Asylum (*British Medical Journal*, Oct. 12th, 1889), states that he had a somewhat similar experience with Sulphonal. Further, he says: "The Tabloids of Sulphonal, prepared by Messrs. Burroughs,

Wellcome & Co., I have found very reliable; each contains five grains of the medicine, and people who object to take a draught take them very readily."

Recent reports go to show that Sulphonal in Crystals or coarse powder is very insoluble.

Tabloids of Compressed Sulphonal are therefore recommended from the fact that the crystals are reduced to an impalpable powder by triturating machinery before compression, the solubility of the drug being thereby considerably promoted. They are best administered at bedtime, crushed in warm fluids.

"Sulphonal produces a natural sleep, from which the patient awakes refreshed and without any bad after-effects."—*British Medical Journal*.

Sulphonal Tabloids (5 gr.)—the most eligible form of the drug—are supplied in bottles containing 25 and 100, at 12s. and 36s. per doz. (subject to fluctuation of the market).

Sulphonal (Bayer) supplied to the Trade at 1s. 6d. per oz. (subject to the fluctuation of the market).

BURROUGHS, WELLCOME & Co., Snow Hill Buildings, E.C.

**THE EUREKA CO.'S**  
Specialities are—  
**BUTTER COLOR, CHEESE COLOR,**  
**AND**  
**ESS. OF CALF RENNET**  
(ABSOLUTELY PURE).



**THE GENUINE BRAND**

To be had ONLY from

**Johnsen & Jørgensen**

5 Savage Gardens,

LONDON, E.C.

Try them means buy them!

They sell themselves!

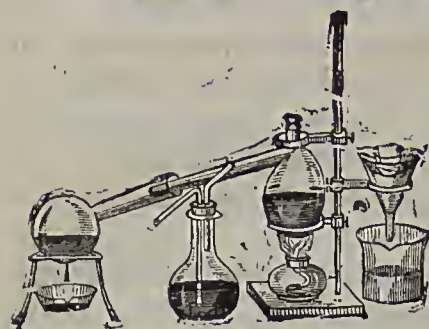
When your customers know them

They won't cram your shelves!

**IF YOU REALLY WANT TO INCREASE YOUR SALE KEEP EUREKA PREPARATIONS.**  
**THEY NEVER FAIL!**



# CHEMICAL AND SCIENTIFIC APPARATUS. J. ORME & CO.

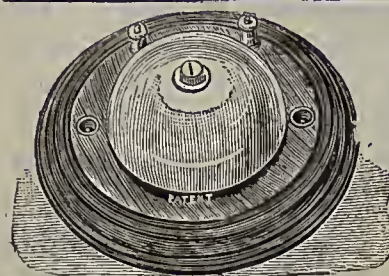


(Late M. JACKSON & CO.),  
Manufacturers and Importers of every description  
of Apparatus for Lecturers or Laboratory use.

By Appointment to H.M. Hon. Board of Inland Revenue, Science and  
Art. Department, Royal School of Mines, Trinity House,  
Pharmaceutical Society, &c.

ILLUSTRATED PRICE LISTS ON APPLICATION.

65 BARBICAN. LONDON, E.C.



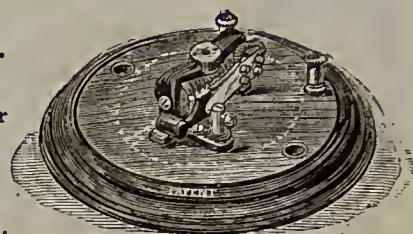
**F. H. BERRY,**  
18 Percival St., Clerkenwell, LONDON, E.C.

Wholesale Manufacturer of Electric Bells, Batteries,  
Indicators, and Electric Apparatus of every description.  
Specialities in Electric Wires and Cables for  
all purposes.

SOLE MANUFACTURER OF

**BERRY'S PATENT ELECTRIC BELL.**  
THE BEST AND CHEAPEST EVER PRODUCED.

Apply for Price List and Opinions of the Press. [2]



## PATENTS, DESIGNS, TRADE - MARKS.

Telegraphic Address:—  
"APPLICANT LONDON"

**BERNHARD DUKES,**

226 High Holborn,  
LONDON W.C.

Undertakes all business relating to  
PATENTS DESIGNS AND TRADE-MARKS.

PLEASE MENTION THIS PAPER WHEN APPLYING.

ATTENDANCE IN THE PROVINCES.

# JOHN SANGER & SONS

Patent Medicine Vendors,  
DEALERS IN  
**DRUGGISTS' SUNDRIES,**  
LOZENGES,



Mineral Waters, Perfumery  
And TOILET REQUISITES.

ILLUSTRATED PRICE LISTS SENT  
FREE ON APPLICATION.

Sample Orders for Bronchitis Kettles, Chest Protectors, Hot Water Bottles, Respirators,  
&c., &c., will receive prompt attention, and doubtless ensure further orders.

*Agencies of all kinds undertaken upon the most favourable terms.*

Warehouse & Show Room: **489 OXFORD STREET, LONDON, W.**

## KEARSLEY'S Widow Welch's FEMALE PILLS.

*These are universally acknowledged to be the Genuine, and Druggists may safely recommend them.*

### CAUTION!

The Proprietors of Kearsley's Original Widow Welch's Female Pills find it incumbent on them to caution the purchasers of these Pills against various imitations by parties who have no knowledge of their peculiar preparation, the Original Recipe having been sold to the late G. Kearsley, of Fleet Street, whose Widow found it necessary to make an affidavit, for the protection of her property, in the year 1798. The Genuine Recipe for Widow Welch's Female Pills has been prepared by them for 100 Years! Chemists are particularly requested to remark that, as a testimony of authenticity, each bill of directions contains an affidavit, and bears the signature of "O. KEARSLEY," in writing, also engraved on the Government Stamp, and each box is wrapped in WHITE paper.

Price 27s. per Dozen, subject to usual Discount. Special Quotations to Shippers and for large quantities on application to

**J. SANGER & SONS, 489 OXFORD STREET, LONDON, W.**



**THE PURE MALT CO.'S EXTRACT of MALT**

A Nutritive and Digestive Food.

**THE PURE MALT CO.'S EXTRACT of MALT**

Prepared in vacuo from Barley, and Peptonized.

**THE PURE MALT CO.'S EXTRACT of MALT**

A Powerful Aid to Digestion.

Retail—6d.  
Wholesale—  
2/- per doz.1/6  
12/- per doz.2/10  
22/- per doz.10d.  
7/- per doz.6d.  
4/- per doz.

A SAMPLE  
BOTTLE  
OF EACH SIZE  
WILL BE  
SENT,  
CARRIAGE  
PAID,  
ON RECEIPT  
OF  
TRADE CARD  
AND 4/3  
P.O.O. OR  
STAMPS.

BEING prepared in vacuo, by an approved method, it contains in a highly concentrated form the nutritive and digestive properties of the best Malted Barley, CARBO-HYDRATES, PHOSPHATES, and ALBUMINOIDS. Extract of Malt is pronounced to be one of the best digestive agents in all cases of faulty assimilation of the elements of nutrition. It derives its efficacy from a combination of all those valuable materials contained in the choicest malted barley. These powerful substances, resolved into dextrine and soluble malt sugar, do not ferment or produce acidity in the stomach, but are easily assimilated by the system. It also contains those natural saline compounds, PHOSPHATES of SODA, POTASH, LIME, &c., so necessary to the well-being of the system, in giving tone to blood, nerve, and brain; altogether nourishing and building up the constant waste of tissue and energy.

Extract of Malt is undoubtedly useful in Consumption and other wasting diseases, and is extensively used in a variety of ways. Mixed with Porridge, Gruel, Arrowroot, Sago, and all farinaceous foods, it renders them easy of digestion. Dissolved in Milk it is of great service, being pleasant to the taste and easily retained, not only when given to infants, but as a demulcent in Colds, Coughs, &c. Makes palatable that valuable restorative—COD LIVER OIL. Taken with the meals, in Coffee, Cocoa, or any beverage, it renders all the nutrient properties of food more easy of assimilation.

For Wholesale Terms in large quantities apply to

**THE PURE MALT EXTRACT CO.**  
**CAMBERWELL, LONDON, S.E.**

City Office:—Mansion House Chambers, 20 Bucklersbury, London, E.C.

Sold by all Chemists, &amp;c., in the principal Towns in the United Kingdom.



# EXCHANGE COLUMN.

This section of "The Chemist and Druggist" must be closed for press by Thursday noon of each week.  
Remittances payable to EDWARD HALSE.

## TERMS.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of 1d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C., and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin & Co."

### FOR DISPOSAL

#### Proprietary Articles.

Four 1 oz. McFarlane's morph. mur., 20s.; ten gross 1-oz. stone hotties, 22s., carriage paid; 1 oz. morph. tart., 7s. 271/26.

#### Educational.

Materia Medica (Evans) Cabinet; good condition, 30s. Kerridge, 7 Poultry, E.C.

#### Drugs and Chemicals.

50 4-ounce bottles Howard's quinine, in one or more lots; delivered London free; offers wanted. 1/23.

Poppy heads, 4s. 6d. 1,000; bag 3d.; sample 3d.; small for crushing, 1d. lb.; bags 3d. Connor, Chemist, Doneaster.

23 lbs. gum (good sorts), 1s. lb.; 20 lbs. vermilion, 2s. 4d. lbs.; 17 lbs. indigo, 3s. 1h.; 28 lbs. gum damar, 9d. lb.; 3ss. musk (grain), 30s.; 1 lb. pulv. Aleppo scammony, 20s.; 4 lbs. opium opt., 10s. 6d. lb. J. C., Lingdale, Skelton, R. S. O.

#### Literature.

*The Chemist and Druggist*, 1886, 1887, 1888; lot 11s. 6d. Stead, Freshfield, *via* Liverpool.

"British Pharmacopoeia," 1885; new, 3s. 6d.; Register Chemists and Druggists, 1889; new, 3s. 6d. 275/15.

Thirty years' *Chemist and Druggist*, and Journals, vols. 4s. 6d.; monthlies 4d.; weeklies 1½d. Williams, Chemist, Coleford, Gloucestershire.

*The Chemist and Druggist* from July to December, 1889 inclusive, complete; what offers? or "Art of Pharmacy" in exchange. F. J. Wilkes, 4 Carlisle Road, Eastbourne.

"Attfield's Chemistry," 11th edition, 8s. 6d.; Wills' "Companion to Practical Botany," 2s.; Wootton's "Problems," 1s. 6d.; Wills' "Chemistry," 2s.; Wills' "Materia Medica," 9th edition, 5s.; "Special Notes for Minor," 2s.; Roscoe's "Chemistry," 2s. 6d. Enness, 9 Bank Buildings, Wandsworth.

#### Formulæ.

Reliable recipes, 6d. each; full set of 130 neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.

Brooks's Formulæ. - Good business may be done with the following:—"Balm of Glycerine and Liquorice"—certain cure for coughs; "Quinine and Iron Tonic"—bright and unchangeable, not unpleasant taste; most useful general Tonic; "Glycerine Cream"—Perfection of toilet requisites, quickly cures chapped hands, frost bites, roughness, cracks, tender feet, and prevents chilblains; "Corn Cure"—Salicylic and iodine, does not readily dry up; answers when other so-called cures fail; "White Oils"—inseparable, milk white, creamy; no better ever offered; costs under 10d. lb. Recipes, 7d. each; six for 2s. 8d., with full instructions for masking, &c., post free; list 400 recipes rec. T. Brooks, Chemist, Hornsey, N.

### Shop Fittings.

Four 6-gallon carboys. Particulars and lowest price to Goodchild, Chemist, Harlesden.

Counter case, bent plate-glass, as Maw's A 13; good condition; 6 feet long; price 95s. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Two nests of drawers, not labelled, with lockers under, good as new, 50, 7 ft. long; 34, 4 ft. 6 in. long; also shop desk, with two doors, as Maw's A 32, 2 ft. 7 in. wide, 2 ft. 6 in. high; what offers? Portway, 225 Jamaica Road, S.E.

Drawers, several nests, very cheap, with glass labels and glass knobs; desk, with glass case in front, 40s.; secondhand shop rounds, dispensing screen, and entire fittings of a chemist's shop, together or separate, great bargains. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Special opportunity.—Shop-rounds, new hand-made, English, stoppering warranted, 10 oz., 4s. 6d.; 20 oz., 5s. 9d.; 32 oz., 7s.; 40 oz., 8s. per dozen, wide or narrow month; gold-labelling, best style, any names, 2s. 6d. per dozen extra; shop jars, dome or canopy, very cheap; pill machines, best quality, 5-grain, for 24, 15s. 6d.; also shop fittings, bargain; state wants. "Drug," 83 Campbell Road, Stoke-on-Trent.

Fittings for sale.—Bargains.—(All numbers refer to Maw's list.)—12 ft. run mahogany-fronted drawers, glass knobs and glass labels, lockers, shelving, uprights, and cornice; 16 ft., 20 ft., and 24 ft. run ditto, cheap; cheap line plate glass case-fronted counters, &c.; dispensing screens, as fig. 54 and 55; ditto with silver glass centre and cases at each side, tablet on top of cases, "Dispensing Department," from 5 ft. to 8 ft., cheap. Elkanah Natali, 207 Old Street, Shoreditch.

Wall case, 6 ft., as A86, 3 ft. 4 in. long, 9 ft. high; several others cheap; sponge cases with bent top, as A 43; ditto, as fig. A41; show stand, as A37; soda water stand, as fig. A59; show stands; 3 plate glass shelves, as fig. 4; ditto; fig. 5, cheap; desks and cases, tooth-brush cases, &c. Elkanah Natali, 207 Old Street, Shoreditch.

Counter cases, as fig. A18, 5 ft. 10 in., 6 ft., 7 ft., 6 in., 8 ft.; ditto, A16, 4 ft. 8 in. long, 4 ft. long, 2 ft. 5 in. long; ditto, A15, 8 ft. long; 3 ditto, each 3 ft. long, as A8, 2 ft. 9 in., as fig. A3, 4 ft., 2 ft. 6 in., 3 ft.; several others, all sizes, cheap. Elkanah Natali, 207 Old Street, Shoreditch.

Specie jars, large stock, from 18 in. to 36 in. high, royal arms, cheap; dispensing scales, pill machines, mortars, pink and blue ointment jars in great variety, new and second-hand shop hotties, black store hotties, ½ and 1 gallon. Elkanah Natali, 207 Old Street, Shoreditch.

Entire fittings of a chemist's shop (new), fixed complete for 50l.; drawings &c., on application; piano wall-case, 8 ft. long, as fig. A83, a bargain. Elkanah Natali, 207 Old Street, Shoreditch, near County Court. No connection with any other house of the same name.

### Soda-water Machinery.

Soda-water plant, complete, second-hand, 21l Particulars, N. S. G. Wilcocks, 45 Avon Street, Bath.

### Miscellaneous.

Few gross Colognes; what offers, cash? Harvey, Margate.

Human skeleton articulated, cheap. Harvey, Margate.

Good sound poppy heads, 4s. 6d. thousand, to clear; bag 3d. Young, Pontefract.

Quantity of stramonium cigarettes, 1s. and 2s. boxes; what offers? 275/35.

Bell-metal mortar, weight 22 lbs., steel pestle, price 17s. 6d. Olive, Chemist, Britonferry.

Microscopic slides; educational, medical, scientific, interesting, from 2s. 6d. dozen; lists free. B., 233 Maida Vale, W.

What offers for Pears' "Dirty Boy"? in perfect condition. J. Crosby Robson, Middlesborough.

Two ornamental iron standards to carry four large carboys, price 25s., cost 90s. Robert Lyon, 83 Christchurch Street, Ipswich.

A pair of stones (16 in. across), that will grind fennugreek or any seeds; price 5l. on rail. Apply, T., 6 Hartington Street, Derby.

Worth notice.—Little Turkey sponges, soft as velvet; finest quality for bathing wounds, eyes, &c., 1s. doz., 3 doz. 2s. 6d., post free. T. Brooks, Chemist, Hornsey, N.

Black teats, good sized medium, fine rubber, 5s. per gross; same quality, two sizes smaller, 4s.; all india-rubber goods equally cheap; also spare 1s. breast-exhauster glasses and mouthpieces, half list price. Butterworth, Pharmacist, Bradford.

One-gallon York Glass Company's graduated displacement apparatus, with glass tap; also one 48 mahogany frame 4-grain pill-machine, with marble slab (Maw's); both in excellent condition; first reasonable offer. W. B. Britton, Bridge House, Barnstaple.

### WANTED.

Medical Directory. 275/16.

Cooley's "Cyclopaedia;" cheap; last edition. Taylor, 23 Cromwell Place, S.W.

120-grain pessary-mould, for 6 or 12. Wells, 26 Cambridge Gardens, North Kensington, W.

A root-cutter; Woodland's antiseptic cordial pills. Griffith, Pharmacist, Weston-super-Mare.

Set shop rounds, opal, vitrified, or recess; labelled preferred. Also pink jars and blue syrups. Noble, Pokesdown, Bournemouth.

Dental chair.—Secondhand; must be cheap; state particulars and price. A. G. Trow, 7 Ladypool Road, Sparkbrook, Birmingham.

"Attfield"; Wills' "Pharmacy"; Wills' "Analysis"; must be latest editions; clean and cheap. Treadgold, 13 West Place, Lancaster.

### Addresses Wanted.

W. A. Topham, herbalist, late of 162 Broughton Road, Salford, Manchester. Thomas Topham, Chemist, Brighouse.



# PURE ESSENCE LEMON

DIRECT FROM THE MAKERS.

SAVE INTERMEDIATE PROFITS AND BUY PURE ESSENCES!

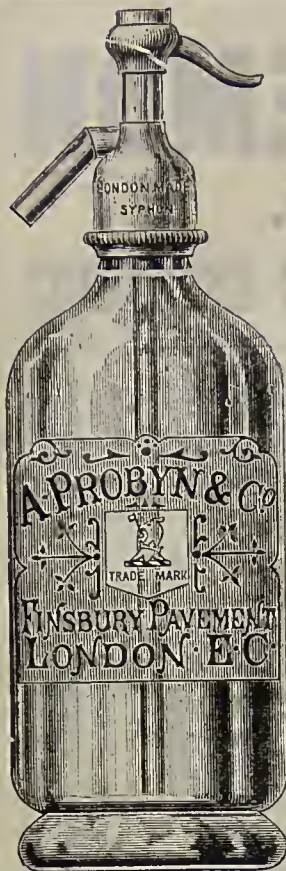


**W. J. BUSH & CO.'S ESSENCES OF LEMON AND ORANGE FACTORY.**

By making the Essences ourselves on the spot, we were enabled last season to offer to the Trade a quality that had never been seen before in this or any other market! Notwithstanding the great opposition we had to encounter, combined with the somewhat libellous statements that were made by our competitors, both here and at Messina—caused through common jealousy—the trade has appreciated our efforts and our success in being able to offer them an Essence so superior in quality, that never before have we sold so large a quantity. Through this fact we are pleased to inform our friends that it has been necessary for us to take another manufactory in Villaggio Gazzi, Messina, which is no less than three times the size of the one in Strada Antico Cimitero, a portrait of which you will see above.

**W. J. BUSH & CO., ARTILLERY LANE, LONDON.**





No charge for packing if ordered in our 1-doz. Boxes, with hinged lids, price 2/9 each.

# BUY THE "LONDON MADE" SYPHON

AND SUPPORT BRITISH INDUSTRY.

It is the Cheapest, Strongest and Handsomest, and Best in the World.

## PRICE 1/6 EACH.

Send for Samples and compare. Coloured Syphons extra.

The above are without Saucer Base, but they can be had with the Drip Saucer, 1/8 each.

Nickel plating from 2½d. each, Silver plating from 4½d. each. Marking on Metal Tops free, but Die charged for at cost price. Marking on Glass by acid process, from 1d. each; steel plate for printing from charged extra, according to design; no charge, however, will be made for this plate for orders of 1,000 and over.

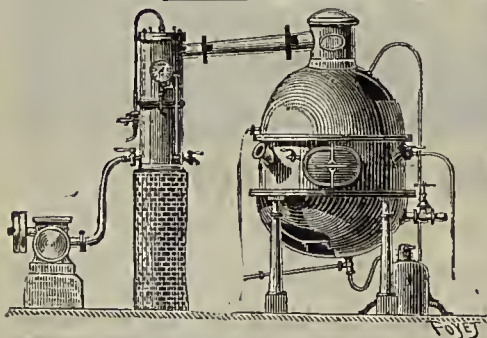
# BARNETT & FOSTER,

NIAGARA WORKS,

26T EAGLE WHARF ROAD, LONDON,

## APPARATUS for DISTILLING & CONCENTRATING in VACUUM

EGROT & GENEVOIX'S SYSTEM, PATENT.



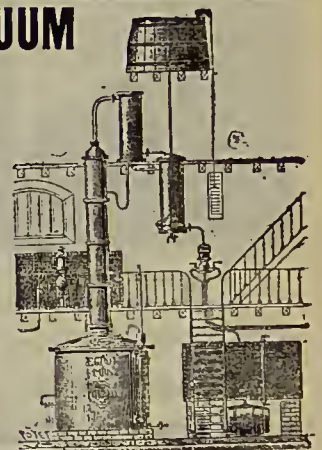
Egrot & Genevoix Apparatus.

STILLS & PANS FOR CHEMISTS,  
DRUGGISTS, &c.  
RECTIFYING APPARATUS  
Egrot's System, Patent,  
FOR BENZOLE, ETC.

EGROT, Chevalier of the Legion of Honour,  
MANUFACTURING ENGINEER,  
19, 21 & 23 RUE MATHIS, PARIS.  
FIRM FOUNDED 1780.

PARIS EXHIBITION, 1889—Beyond Competition as  
Member of Jury.

PRICE LIST FREE.



Rectifying Apparatus.

## NATURAL ARSENIO-FERRIC MINERAL WATERS OF

# LEVICO

SOUTH TYROL.

DOSE—One Tablespoonful mixed with Seltzer or Red Wine three times a day.

Price per dozen Bottles, 12/ net; price per 100 Bottles, 86/ net. Delivered free on rail London.

They are particularly valuable in the treatment of Anæmia, Chlorosis, Syphilis, Skin Diseases, Menstrual Disorders, Scrofulous Diathesis, and most especially Nervous Affections of all kinds.

To be had of all Chemists and Druggists.

Agency, 24 Coleman St., London, E.C.

## MILLAR'S BRITISH WINES.

ORANGE (suitable for Quinine), GINGER, RAISIN, COWSLIP, CHERRY, &c.

A. MILLAR & CO., Thomas Street, DUBLIN.

Sole Agents for London and District—H. J. ROYDANT & CO., 75 Acre Lane, Brixton, S.W.



# The Chemist and Druggist

## SUPPLEMENT

Businesses Wanted.  
Businesses for Disposal.  
Premises to Let.  
Auction Sales.

SATURDAY, FEB. 15, 1890.

Partnerships.  
Situations Vacant.  
Situations Wanted.  
Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

OFFICES: 42 CANNON ST., LONDON, E.C.

### CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. Orridge & Co. has been known as a Transfer Agency since the year 1845, and is well known to all the leading firms in the trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—LONDON, W.C.—Handsomely-fitted shop, situate in a main thoroughfare in close proximity to several large hotels; returns over £800 yearly; full particulars furnished and inspection invited; about £900 required.

2.—LONDON (City).—Dispensing and Retail, with largely extended Postal business; returns about £700 yearly, with good profits; good stock; no residence; no Sunday business; price about £700.

3.—LONDON, S.W.—Dispensing and Light Retail; returns between £700 and £750; good profits; shop is well fitted and stock good; large house, very convenient; business open to the fullest investigation; will be sold at a lump sum, or valuation if preferred.

4.—LONDON, N.—General Retail and Dispensing Business, situate in a good business locality, with Post Office attached, the salary of which is present; large and well-fitted shop; good stock; returns nearly £500; good 8-roomed house with garden; price £400.

5.—LONDON SUBURB, N.W.—Very large and handsome shop, with good stock; present return at the rate of £400 yearly under an Assistant; vendor will sell at less than the value of stock and fixtures; full investigation permitted.

6.—LONDON, S.E.—In a busy locality; well fitted shop, with exceptionally good stock; returns nearly £300 yearly, with good profits; capital 8-roomed house with private entrance; capital opportunity for a good pushing man; price £750.

7.—LONDON (within easy distance of)—Good old established business, held by late owner many years; present returns between £400 and £450; can easily be increased; very good house and roomy shop; price about £250.

8.—WEST OF ENGLAND.—Watering-place; Retail and Dispensing Business, held by vendor many years; returns £600 yearly; profits large; large house, private entrance; corner position; price £550.

9.—SURREY.—Attractive locality; first class business; returns £800 yearly; profit above the average; handsomely-fitted shop; very good house, with garden and stable; price about £750.

10.—MIDLANDS.—Large commercial town; good-class business in a suburban district; returns £400; well-fitted shop with good stock; good house held on lease; full investigation permitted; price to be arranged equitably.

11.—SEASIDE (South).—Very pretty and fashionable town; established business; returns between £400 and £500; can be easily increased; at present managed by an assistant; price about one year's return.

12.—WESTERN COUNTY.—Large town; Main and Branch Business, returning about £700 yearly, easily worked, and admitting of extension; particulars on application; price required about £455.

13.—WALES.—Mixed Business, with Retail and Stationery; returns £1,400 yearly; very profitable, and admitting considerable extension; good 10 roomed house, lease if wished; price £350.

14.—WALES.—Seaport; Retail and Dispensing; well-fitted single-fronted shop and good stock; very moderate rent, lease if required; returns about £500; price about £400.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & CO. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the special attention of a London agent.

SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.

MESSRS. ORRIDGE & Co. Register Vacancies for Situations FREE OF CHARGE.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

### TENDER.

FULHAM VESTRY.—To Manufacturers of Disinfectants.—Notice is hereby Given, that the Vestry of the Parish of Fulham are prepared to receive Tenders for the Supply of Disinfectants for the twelve months ending 25th March, 1891.

Tenders must be made on the forms provided by the Vestry, sealed and endorsed "Tenders for Disinfectants" and delivered at the Vestry Offices by 4 o'clock P.M. on Wednesday, the 5th day of March, 1890.

The Vestry do not pledge themselves to accept the lowest or any Tender.

(By order),

W. J. H. DENSELOW,

Clerk to the Vestry.

Vestry Offices, Walham Green, S.W.  
12th February, 1890.

### PARTNERSHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

AN experienced Dentist (L.D.S. England) seeks to establish a good-class Branch practice in, or within one hour from, London; would arrange with a chemist. Address, "Fides," Spier's Library, 26 Great Quebec Street, W.

PARTNERSHIP or otherwise.—£2,000 required to further extend an established Wholesale and Manufacturing Patent Medicine Business, dealing in three registered and protected profitable specialties; no technical knowledge necessary, and personal services optional; good income can be relied on, the business being thoroughly genuine and open to strict investigation; to anyone desirous of acquiring an interest in a high-class lucrative concern this is an opportunity that rarely occurs. Messrs. Browne & Co., Accountants, 22 Buckingham Street, Strand.



# F. J. BRETT,

## VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

### BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.

**LONDON, W.**—Light Retail, Dispensing, and Prescribing; no booking; returns £1,000; price £475.

**LIVERPOOL.**—Select Retail and Dispensing; returns £600; rent £45; price £530.

**BIRMINGHAM.**—Light Retail, Dispensing, and Prescribing; returns over £600; rent low, on lease; goodwill £50; stock and fixtures at valuation, about £500.

**SUSSEX.**—Dispensing, Light Retail, and Prescribing, at good prices; pleasant seaside town; returns £500; price £450.

**LANCASHIRE.**—General, Retail, and Prescribing, with fair Dispensing; returns £1,600 (over); price £800.

**SURREY.**—Light suburban Retail; returns £300; price about £200; excellent opening for Dentistry.

## BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**LONDON, S.W.**—Leading Thoroughfare.—For prompt disposal, lease expiring (new lease for over 30 years to be had, premium £200), old-established Dispensing and very profitable cash Retail, in a thickly-populated, largely-increasing, healthy neighbourhood; corner shop; returning (under manager) nearly £600 (last month's over £60); rent £70, can be further reduced by letting. Principals only may apply to T. J. Savage, Esq., 59 Ludgate Hill, E.C.

N.B.—Owner having opened a country business (on account of wife's health) in a village 180 miles from town, no reasonable offer will be refused; every investigation is invited from cash purchasers only. No agents.

**RETAIL, Dispensing, and Prescribing, and small Wholesale Business** South Coast, for immediate disposal; good reason for leaving; in coming £90. Apply, Röhss, Auctioneer, Southampton.

**FOR sale, Patent Medicine Business;** full operation; short credits; principally export; all indoor work; sales book open to principals only; price moderate. Apply to Letts Brothers, 8 Barlett's Buildings, London, E.C.

**TO be Sold or Let, the Dwelling-house and Business Premises, No. 21** High Street, Bridlington, Yorkshire, now occupied by Mr. R. Gatenby, Chemist, and for many years previously by the late Messrs. Rayner & Cooper, Chemists and Druggists. For particulars apply to Messrs. Harland & Son, Solicitors, Bridlington.

**PLYMOUTH.**—Most desirable position; old-established good-class Retail and Dispensing Business; returns over £600; large profits; handsomely fitted double-fronted shop; good stock; price £500. For full particulars write A. B., care of Messrs. Barron, Harvey & Co., Giltspur Street, London.

**£150.**—**LONDON, N.** Genuine Light Retail and Prescribing Business; good corner position in main road; house small, rent moderate; returns about £5 weekly, should do £10; good profits; suit young man, or do for branch business. Address, J. W., King & Co., 64 Upper East Smithfield.

**KENT.**—About 8 miles from London, the Fixtures and Bottles in an old-established Business, with nucleus of trade; immediate possession; low rental; excellent opportunity for a young man with small capital; £100 only required. Apply, Orridge & Co., 32 Ludgate Hill (personal application if possible).

**VILLAGE BUSINESS for Sale** in the West of England, returning over £500 in Drugs (no Mixed or Agricultural), and a profitable agency which more than pays rent and taxes; net profit £217; good house, large shop; price £375; stock and fixtures worth the money. G., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**TO CHEMISTS AND DRUGGISTS.**—To be disposed of by private treaty, an old-established Retail and Dispensing Drug Business in Cheshire; returns on an average of past five years £831; rent £35; commanding front; immediate possession; price for stock, fixtures, and goodwill £500. Apply, J. Woolley, Son & Co., 57 Market Street, Manchester.

**£550.**—An old-established Light Retail, Dispensing, and good Prescribing Business; corner shop, main thoroughfare, densely populated; opposition nil; handsomely fitted, well stocked; very profitable; good house, side entrance; low rent; same hands 26 years; owner retiring; a bargain. Address, "Dentist," 315 Wheeler Street, Birmingham.

**LONDON, N.**—Neat General and Dispensing Business; returns over £400, profits nearly half; lease 4½ years; commodious house; side and back entrance; good opening for dentistry; main road to City; established 50 years; only changed hands once; price £400. Address, "Alpha," care of Mr. Alderman, 21 Gainsboro' Road, Bow, E.

**FOR immediate Disposal, a small Retail Business ;branch; good house; stock and fixtures at a valuation; satisfactory reasons for disposal.** "Chemicus," 236 Beverley Road, Hull.

**FOR disposal, an old-established Dispensing Business in a fashionable town in the West of England; doing a profitable trade; price £550.** For further particulars apply, "Fides," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**SMALL Retail and Dispensing Business in good neighbourhood for sale; shop well fitted and stocked; good house; good opening for dentistry; no reasonable offer refused.** "D," care of Wright, Layman & Umney, Southwark Street, London.

**FOR immediate disposal, a West-end Dispensing Business; rent low; full prices; established 30 years; to a suitable gentleman, half of the purchase-money could remain.** Address, "Medicus," S. Pearce, Solicitor, 244 Mansion House Chambers, Queen Victoria Street, E.C.

**£550.**—**LONDON, S.E.**—Good-class Suburban Retail and Dispensing Business; returns, £720; rent, £40; price, £550; almost unopposed position, and plenty of scope for improvement; nice house and garden. Address, R. F., 5 Devonshire Road, Forest Hill, S.E.

**EAST COAST.**—Prescribing, Dispensing, and Retail; average returns £475 (under adverse circumstances); must do considerably more in good hands; corner shop, double-fronted, nicely fitted, well stocked, private house at side; price £450. Address, E. C., 114 Pimlico Road, Chelsea.

**OFFERS** are invited for the Goodwill of an old-established Business in the east London suburb; stock and fixtures at valuation; returns £500; lease; low rent, nearly covered by Post Office; satisfactory reasons for disposal. Address, W. E., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**GOOD opportunity for early succession to the only Chemist's Business in small town; fine scope for increase; double-fronted shop; good house and garden; low rent on lease; nearest opposition 4 miles; returns £336, increasing; price £260.** "Opium," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**URGENT.**—Proprietor's other engagements compel immediate sale of very old established Light Retail; good class country town; price, valuation of stock and fixtures; a bargain to beginner; double-fronted shop, nicely fitted; rent low; ample scope for large Mixed trade; hours easy; no Sunday work. "Medicus," 1 Bradford Street, Shrewsbury.

**MANCHESTER.**—Increasing well-established Chemist's, Drysalter's, Wine and Spirit Business; first class neighbourhood; low rent; large premises; reasons for selling; establishing manufacturing premises for two specialities in good demand; fixtures and goodwill, £260; stock at valuation, about £500. Apply, by letter, W. Maben, 29 Blantyre Street, Manchester.

**CHEMISTS and Grocery Business for disposal.**—To be disposed of immediately, an old-established Chemist and Grocery business; excellent position; large double-fronted shop and good house; stock and fixtures at a valuation; good opportunity for an energetic man; death of proprietor sole reason for disposal. Executors of the late J. H. Elmett, 17 Bull Ring, Horncastle.

**LANCASHIRE.**—Genuine Light Retail and Dispensing Business! doing about 500 new prescriptions yearly, and increasing; shop well fitted in mahogany; good and large house, with gardens, on lease; returns about £400, increasing; satisfactory reasons for disposal; particulars to bona fide intending purchasers. Address, "Pyro," care of Mr. Wellings, Messrs. Evans & Co., Liverpool.

**£900.**—In High Street of large town, 30 miles from London, good-class Light Retail, Dispensing, and Prescribing Business; returning nearly £1,000; net profit £450 per annum; same hands 25 years, retiring; low rent, lease; price £900; opportunity seldom offering; introduction given. "Zingib," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**W. —HANDSOMELY-FITTED** and well-stocked Pharmacy; thickly populated and rapidly increasing neighbourhood; large house; rent £55, £43 let off; recently opened; returning under junior nearly £7 weekly; principal under two years could do £1,000; satisfactory reasons given for sale; reasonable offer accepted. "Aurantif," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**WORTHING.**—**Re TYSON.**—Mr. G. B. Crocker is instructed to receive offers for the Stock and Trade Fixtures of a Chemist's Business, where a very large Dispensing and lucrative Cash Retail trade has been carried on with the greatest success; a lease of the premises will be granted; gentlemen with £300 to £1,000 can obtain further particulars on application. Transfer and Valuation Offices, 15 Walbrook, E.C.

**LANCASHIRE.**—Manufacturing town, agricultural district; a General, Retail, Prescribing, and Country Business, centrally situated near to principal market; returning about £400; double-fronted shop and good house (at low rent), £40 per annum; stock and fixtures at valuation, about £300. Also small Retail and Prescribing Branch Business; corner shop, in central busy street; under management, neglected; returns last year £250; rent £30; price £100, or valuation. For further particulars apply to "Isinglass," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.



## BUSINESSES WANTED.

**WANTED**, small, neglected Business, payable by instalments; energetic man, prescriber and dispenser. F., 113 Riversdale Road, Highbury, N.

**WANTED** a gentlemanly Retail Business; price from £500 to £700 cash; South or West of England preferred. Particulars received in strict confidence by R. I. R., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

## TO LET.

**TO BE LET.**—No. 1 Charles Street, St. John's Wood, where an established Business of Druggist and Dentist has been carried on for thirty years, is now closed; a well-fitted shop and fixtures may be had on very moderate terms. Apply on the premises.

## APPRENTICESHIPS.

**WANTED**, an Apprentice; moderate premium, partly returned during term; time for study. J. Jones, Swinton, Rotherham.

**WANTED** to Apprentice to a first-class Chemist, a youth who has passed the Preliminary examination. Write, stating particulars, to R. T., care of Post Office, Southgate, N.

## SITUATIONS OPEN.

*3s. 6d. for fifty words; 6d. for every 10 words beyond.*

**WANTED**, a Dispenser and Bookkeeper, to a firm of surgeons. Apply, stating age, &c., C. J. Muriel, 2 Willow Lane, Norwich.

**BRANCH Manager**; qualified; good Prescriber; unfurnished quarters; not over 35. Full particulars, D., 197 Sbirland Road, Paddington.

**WANTED** a qualified Assistant with West End experience for Retail Counter; outdoor. Matterson's Day and Night Pharmacy, 103 New Oxford Street, W.C.

**FOR** India, healthy district in Himalayas; qualified Assistant about 25 years of age; 3 years' agreement. Apply, Hearon, Squire & Francis, 38 Southwark Street, S.E.

**WANTED**, a Junior (indoors), for light Retail and Dispensing. Send photo, age, full particulars, reference, and salary, Edwin Guy, Chemist, 27 and 23 Eign Street, Hereford.

**WANTED**, at once, Junior Assistant for a Light Retail and Dispensing business (indoors). State age, height, and salary required to D. Greenwood, 4 Petty Cury, Cambridge.

**WANTED**, good Junior Assistant for the Retail with fair experience. State age, height, and salary required (outdoors). W. Kemp & Son, Wholesale and Retail Chemists, Newcastle.

**WANTED** immediately, a qualified Assistant as Manager; must be thoroughly reliable. State terms and references, which must be good, to Messrs. Thos. Hall & Sons, Chemists, Grantham.

**WANTED**, one of the Wholesale Druggists to take over the Sale of a valuable and well-known Patent Medicine. Please apply, M. B., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**WANTED**, a qualified Assistant, able to prescribe; outdoor; references must bear strictest investigation; afternoons free excepting Saturdays. Address, Mrs. Merrett, 57 Hyde Park Road, Southsea.

**MESSRS. REINHARDT & SONS** have a vacancy for an experienced Assistant, from 25 to 30; must have good address. State age, height, and salary; send carte and reference. 76 Briggate, Leeds.

**INVOICE** clerk; Junior wanted; must have had previous experience, write a good hand, be quick at figures, and be possessed of good references. Apply by letter, to Wright, Layman & Umney, Southwark, London, S.E.

**YOUTH** wanted immediately in Patent Medicine Department of London Wholesale House; aged about 15; unblemished character; every opportunity for rising. Apply T., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**PILL-MAKER** and Coater wanted at once; none but first-class and experienced men, accustomed to manufacturing on a large scale, need apply. Apply, by letter only, to X. Y. Z., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**WANTED**, at once, steady, trustworthy and reliable Assistant, or good Junior or Improver, for Mixed country business with brisk counter trade; must be willing and obliging and not afraid of work. Full particulars to S. Smith, New Swindon.

**IMMEDIATELY.**—A first class Assistant; qualified; indoors, and for a permanency; one who has obtained good experience in Dispensing and all-round work in leading houses; aged 23 to 30. Address full particulars, with photograph, to Thomas Brothers, College Pharmacy, Cheltenham.

**SECOND Assistant** required as dispenser; qualified; indoors. J. H. Williams, 110 Cheltenham Road, Bristol.

**SMART Junior**; accustomed to Mixed trade. Apply, stating full particulars, salary required, &c., to Johnson, Chemist, 61 Lee Street, Oldham.

**WANTED**, Junior; neat and careful Dispenser, used to Light Retail trade; must have good references. Apply, with carte, to W. Sharpe & Son, Chemists, Gloucester.

**IMMEDIATELY**, Junior, indoors; for first-class West End drug stores. Apply, stating full particulars, to X., Messrs. Hodgkinson & Co., 198 Upper Whitecross Street, E.C.

**MARCH 1st**, Qualified Assistant; indoors; for front counter; cash business; branch, N.W. Apply, stating salary, experience, &c., to J. H. Lewis, 22 and 24 Great Portland Street, W.

**JUNIOR** for a good Dispensing business; one with a knowledge of Mechanical Dentistry preferred. Apply, with all particulars, to D. M. D., Messrs. Hill & Son, 103 Southwark Street, Boro', S.E.

**JUNIOR**; age about 20 or 21; of good address and references; indoors. Full particulars, and class of experience, salary required, with photo. (to be returned), to Gibson, Chemist, Post Office, London Street, Reading.

**AT** once, a Junior Assistant, about 21 years, accustomed to Mixed Retail business; please enclose photo (to be returned), and state age, height, and salary required. Address, "Junior," 42 High Street, Crewe.

**WANTED** immediately, Turnover or Junior Assistant; only one accustomed to good-class country business treated with. Apply, stating references, height, age, and enclosing photograph, to Baubury, Dursley, Gloucestershire.

**WANTED** immediately, a Junior to act as Dispenser and take charge of Doctor's Retail; age not to exceed 25; single; English; outdoors; personal application only. Dr. Smith, 111 Keeton's Road, Bermondsey, near Spa Road Station, S. E. Railway.

**DRUGGISTS' SUNDRIES.**—Wanted by City house, experienced man to manage this department. Apply, by letter, stating age, salary required, and where previously employed, to "Bottles," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**FOR** South Africa, wanted, at once, a competent Assistant for a first-class Dispensing and Retail Business; three years' engagement. For further particulars, apply to Lorimer & Co., Wholesale and Export Druggists, Britannia Row, Islington, N.

**CHEMISTS' Assistants.**—Wanted, at once, qualified Assistant for the Transvaal; three years' engagement; £15 first, £17 10s. second, and £20 third year per month. Apply, by letter only, to W. J. B., care of Burgoync, Burbidges & Co., Coleman Street, London, E.C.

**CLERK** wanted, acquainted with the drug trade and with a knowledge of Spanish; used to consular invoices; one acquainted with the South American trade preferred. Apply, stating experience, salary required, &c., to J. C., Messrs. Street, 30 Cornhill.

**QUALIFIED Assistant and Traveller**, to represent wholesale firm of Druggists and Drysalers in the Lancashire districts; enclose carte and testimonials (to be returned). Application endorsed "Lancashire," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**MANAGER**, with view to purchase; established unopposed seaside business; retail, prescribing, teeth extracting, &c.; anyone with £100 cash can secure a year's engagement and the business at the end of term. "Veritas," care of Evans, Gadd & Co., 97 Fore Street, Exeter.

**JUNIOR Assistant** wanted (indoors), not under 20 years of age, for light country business; time allowed for study; must be able to prescribe and dispense. Apply, with reference (enclosing carte), stating age, salary required, &c., to W. Jacobs, Medical Hall, Guildford, Surrey.

**TRAVELLER** wanted by an old-established fancy soap maker, for the sale of his soaps and perfumes amongst Retail houses in London and suburbs. Address, stating all particulars as to previous employment, connection, &c., to S. P., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**YOUTH** wanted, not under 20, by a patent medicine proprietor in large town; he must have experience and be able to wrap a 6-ounce bottle neatly and very quickly; a permanent engagement; state age, wages, reference, and experience. Address, W. W., Messrs. Mather & Crowther, 71 Fleet Street, E.C.

**WANTED**, first week in March, an Assistant; must be quick and accurate dispenser; able to take charge in absence of principal; for a Mixed trade; aged about 24; unqualified preferred. Apply, stating age, height, salary required, indoors, experience, with reference, to E. Wootton, Chemist, 76 High Street, Margate.

**JUNIOR** or Improver, of good experience; must be quick and energetic, for a good Mixed business, without drysaltery; time to attend classes allowed to a deserving young man; salary £20 to £25 indoors; comfortable home; porter kept. Address with ever, necessary particulars, Fredk. Gibson, Gooch Street, Birmingham.

**TRAVELLER** wanted.—One of the oldest firms in the Ceylon Tea Trade is requiring the services of a gentleman calling upon chemists; their specialties in leaden packets are well known and command a large sale; applications are invited (in confidence) from gentlemen holding appointments with leading houses in other goods. Apply by letter only, "Ceylon," care of T. J. Sheppard, 15 Eastcheap, E.C.



**AT ONCE.**—A competent Junior, able to extract and prescribe, to manage a village branch for few months; one qualified and with a view to purchase would be preferred; must have undeniable references; state age, last employer, experience, salary (which must be moderate), photo if possible, &c. Jepson, Chemist, Sheffield.

**WANTED** immediately, an Assistant; indoors; accustomed to good mixed general trade; must be a neat dispenser, reliable and obliging. Apply, enclosing carte (to be returned), stating experience and salary required, to R. H. Kearnes, Bilston, Staffordshire. Hours from 8 to 8.15, except Monday and Saturday; no Sunday duty.

## SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

**PART-TIME;** indoors; London; 23. "Apothecary," 33 Gordon Road, Clifton, Bristol.

**ASSISTANT** in Light Retail and Dispensing; disengaged. Marmion, 8 Swan Bank, Bilston.

**MANAGER** or Assistant, with view to purchase. "Qualified," 59 Park Avenue, Oswestry.

**DOCTOR** or Chemist; good Dispenser; 28; time for readlag. W. J., 55 Great Ormond Street, W.C.

**JUNIOR;** aged 20½ years; over 5 years' experience; good references. J. C., 26 Mill Hill Lane, Leicester.

**OUTDOORS;** good experience; aged 25; disengaged. "Chemist," Crauford Villa, Thrapstone, Norths.

**ASSISTANT** (25); 9 years' experience; London stores preferred. Leech, 38 Alexandra Road, Wembleton.

**TEMPORARY;** outdoor; branch; qualified; married; experienced. W., 113 Riversdale Road, Highbury, N.

**LOCUM TENENS** or Manager of Branch, by experienced man, aged 36. M. S., 18 Laura Place, Southampton.

**ASSISTANT** or Branch Manager; outdoors preferred. A., 2 Edward Villas, Carshalton Road, Sutton, S.W., Surrey.

**AS** Junior; aged 20; height 5 ft. 9 in.; 4 years' experience. P. L. Morgan, Penpergwm, near Abergaveany.

**ASSISTANT** or Manage Branch; single; unqualified; indoors; permanency preferred. Lumbus, Aston, Nantwich.

**JUNIOR;** end February; references; aged 20; height, 5 ft. 10 in.; photo. F. A. Sims, Belle Vue Terrace, Southampton.

**JUNIOR;** aged 21; height 5 ft. 11 in.; 6 years' experience; good references. R. Hall, 20 Queea Street, Market Rasen.

**IMPROVER;** height 5 feet 6 inches; 4 years' experience; small salary; comfortable home. A., 137 Chorlton Road, Manchester.

**ASSISTANT;** unqualified; general experience; good counterman; single; aged 35. "Hydrarg," Medical Hall, Canterbury.

**TRAVELLER.**—Advertiser wants situation on commission; South and West of England. K., 25 Manningham Lane, Bradford.

**ABOUP** end of March; Minor; aged 24; London; outdoor. "Chymia," care of Mr. Roberts, 45 Woodblue Grove, Peuge, S.E.

**AS** Senior, Branch Manager, or Dispenser; 25 years' experience and references; married. "Minor," 15 Stuart Road, Walton, Liverpool.

**EVENING** Employment; a qualified man has three or four evenings disengaged after 6 o'clock; thoroughly reliable. L., 194 Harrow Road, W.

**JUNIOR,** aged 20; 5 years' experience; good Retail and Dispensing; Birmingham preferred. Baynard, 178 Balsall Heath Road, Birmingham.

**RETAIL.**—By a young man; aged 20; tall; has had 7 years' experience in wholesale. Particulars to Jns. McClimou, 56 Church Street, Bradford, Manchester.

**MANUFACTURING** Chemists, &c.—Gentleman, well up in Drugs, Culinary and granular preparations, is open for engagement. Address, W. B., 12 Sydney Street, Chelsea.

**AS** Assistant; Dispenser; locum tenens; 10 years' reference; well up in laboratory work and prescribing; permanency preferred; smart appearance; good organist. "Temps," 93 Liverpool Road, N.

**WHOLESALE** Druggists and Druggists' Sundriesmen.—Advertiser (23) seeks position of trust; thorough knowledge; highest references. C. W., care of C. T. Lewis, 61 King William Street, E.C.

**ADVERTISER,** having established connection among Chemists and Storekeepers in Australia, and who is at present in London, would like to receive communications from Manufacturers wishing to be represented. Address, H. C., care of Ashby & Co., 26 Leadenhall Street, E.C.

## MISCELLANEOUS.

*Special charges are made for Advertisements under this heading, which can be obtained on application.*

**PERSONS** wishing to Purchase or Sell their Businesses will do well to communicate with Messrs. Fowler & Miller, Chemists' Transfer Agency for the North of England, 60 Fawcett Street, Sunderland.

**DENTISTRY.**—First-class Mechanical work undertaken for the Profession at moderate terms; good West-end references as to ability, &c.; punctuality guaranteed. W. E. Hill, 220 High Holborn, W.C.

**WHO** can give instructions (in consideration of pecuniary compensation) for removing the superfluous oil from ground mustard seed and for making mustard powder? and who can supply the necessary machines for same? Address, F. C. 596, care of Haasenstein & Vogler, A. G., Leipzig.

**COMMISSION** offered to gentlemen calling on Chemists and Grocers for introduction of Dr. Wilson's Pure Cacao. Replies must state ground covered and present engagements. Housekeeper, Midland Buildings, Birmingham.

**FOREIGN HOUSES,** being Exporters of Produce, and desirous of first-class representation in England, are invited to make offers. Advertiser employs travellers, and would probably buy for own account. 509, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**MAGNESITE,** raw, ground and burnt, magnesia powder, every kind of tripoli, polishing powder, silver-polish, talc, graphite, terra-siena, raw and burnt, fine, clean powder, mineral pumice stone, polishing chalk, slate powder, emery powder, spath of every kind, quartz from own quarries; cheapest market. Heinrich Bruck, Michaelkirch Str. 43, Berlin, S.O.

**CAPITAL FOR INVESTMENT.**—A London firm having a client prepared to invest £50,000, or a portion, but without taking any active part, in some first-class old-established manufacturing or trading concern, would be glad to allow a commission to anyone making suggestions which would lead to a suitable investment being obtained; the business must be entirely non-speculative, of well-known repute, and show satisfactory profits for some years past. Communications, entirely confidential, to "Banker," care of Messrs. C. Mitchell & Co., 12 Red Lion Court, Fleet Street, London.

In the Press. Sixth Edition, revised to date. 24mo, limp roan.

### THE EXTRA PHARMACOPŒIA,

WITH the Additions introduced into the British Pharmacopœia, 1885, and Medical References and a Therapeutic Index of Diseases and Symptoms. By WILLIAM MARTINDALE, F.R.S., and W. WYNN WESTCOTT, M.B. Lond.

London: H. K. LEWIS, 136 Gower Street, W.C.

### PRELIMINARY AND MINOR.

**ALL** Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. Student's Herbarium, 100 specimens, 7s. 6d., post free.

### STUDENTS' AIDS TO EXAMINATION.

**PRELIMINARY.**—Arithmetic and Metric System, 1s. How to Write an Essay, 3d. Cæsar Simplified, 1s. Knotty Points in Latin Grammar, 1s. 6d. MINOR.—Equations Simplified, 1s. Illegible Autographic Prescriptions, 1s. Notes on Dispensing, 1s. Prescriptions given at the Minor, 6d. "Chemist," care of Mr. J. Edwards, Wye, Kent.



146 MINORIES, LONDON E.C.  
New York  
Sydney  
&c.

**SODA WATER MACHINERY**  
AND ALL ACCESSORIES FOR THE TRADE

**BRATBY & HINCHLIFFE** LIM.

HEAD OFFICE  
SANDFORD ST., ANCOATS, MANCHESTER.

BOXES, BOTTLES, MACHINERY,  
ESSENCES  
Catalogues, Circulars, Testimonials  
Post Free



# SYPHONS & SELTZOGENES

GREAT REDUCTION IN PRICE.

We have recently been entrusted with a most important Agency for the above-named goods. Our Principals are the best known firm in Paris, and the Syphons are undoubtedly the cheapest and strongest in the market. The tops are made of pure English Tin, guaranteed free from lead. The Seltzogenes are made on the well-known "Fevre" system, and each one is thoroughly tested before being sent out.

WE CAN GIVE TO LARGE AND SMALL BUYERS EXCEPTIONALLY LOW PRICES.  
PLEASE WRITE US AT ONCE FOR PRICES, STATING QUANTITY OF EACH KIND REQUIRED



## SODA-WATER MACHINERY.

MELBOURNE EXHIBITION, 1889, UNPRECEDENTED SUCCESS.

We have obtained at the above Exhibition

## 3 HIGHEST AWARDS POSSIBLE

A feat never accomplished before by any other house supplying requirements for the Aërated Water Trade.

These awards will carry with them **THREE GOLD MEDALS**, which were awarded as follows:—

- 1st—SODA-WATER MACHINERY (Highest Award possible).
- 1st—ESSENTIAL OILS & FRUIT ESSENCES (Highest Award possible).
- 1st—PATENT AND ORDINARY BOTTLES (Highest Award possible).

WRITE FOR NEW ILLUSTRATED CATALOGUE, POST FREE.

## BRATBY & HINCHLIFFE, LIM.

Aerated Water Engineers and Glass Bottle Manufacturers,

SANDFORD ST., ANCOATS, MANCHESTER

And at 146 MINORIES, LONDON, E.C.





## ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt,  
and sound Port Wine.

### REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).  
December 15, 1888.

## ROBINSON'S ORANGE WINE.

Specially prepared for Quinine Wine, does not deposit, will keep good in any climate, and well adapted for Export Trade. Supplied in Casks containing 9, 18, 30, 60, or 120 Gallons. Terms on application. [2]

## PHARMACEUTICAL SHERRY WINE.

This Wine is well adapted for Pharmaceutical Preparations, and is the strength ordered by the B.P. Price, in 8-Gallon Casks, 5/6 per gallon; in 2-Gallon Jars, 6/- per gallon, carriage paid. Casks charged 7/6, Jars 2/6, and allowed if returned. Cash or satisfactory reference to accompany order.

B. ROBINSON, Distiller and Brewer of British Wines, Church St., Pendleton, Manchester.

## WILKINSON'S COMPRESSED

They are introduced to the public to enable them to make their own HOP BITTERS, YEAST, HOME BREWING, and numerous other purposes. Full particulars given in each packet.

Samples and Prices sent on application to

A. WILKINSON & SONS, 37 CANNING PLACE, LIVERPOOL.

P.S.—Chemists will naturally see the great advantage in making their own Bitters from the Pure Hop itself.

Dealers in every description of Isinglass.

## ENGLISH HOPS.

Best Hops compressed into small parcels of one pound and half-pound, and sent out in cases containing 30 lbs. each. These hops are specially selected and compressed for keeping purposes, and will retain their aromatic strength for a considerable time.

## SOLD EVERYWHERE.

Makes the best  
**GRAVIES, SOUPS, &  
SAUCES.**

IMPROVES  
**STEWES and  
HASHES.**

ASK YOUR GROCER FOR  
**GRAVINA**  
EDWARDS' GRAVY POWDER.  
TRADE MARK.

REGISTERED

PUT UP  
IN

Self-opening Canisters

1-lb., 1/10; ½-lb., 1/-; ¼-lb., 6d.

Sample Free on receipt of Business Card.

**NOURISHING.**

**ECONOMICAL.**

SOLE MANUFACTURERS—

**F. KING & CO., LTD.**

3 to 6 Camomile Street, LONDON;

26 WARING STREET, BELFAST.

PEPTONATE OF IRON

SOLE MAKERS

DENAAYER'S PEPTONES

LONDON

PEPTONE OF MEAT

BEAS TRADE MARK

# DENAAYER'S

## LIQUID PEPTONES

STERILIZED

Free from microbes!  
Keep good for ever in all climates.  
118 BISHOPSGATE STREET WITHIN, LONDON, E.C.

**DENAAYER'S PEPTONATE OF IRON.** A bland, non-irritating and most easily assimilable ferruginous preparation. For debilitated constitutions, children, and aged people.

**DENAAYER'S PEPTONE OF MEAT.** A powerful restorative for all ailments of the stomach, stimulates general nutrition. Is retained when the stomach rejects all other food. Pleasant to taste.

Of all Chemists and Wholesale Houses.

A bland, non-irritating and most easily assimilable ferruginous preparation. For debilitated constitutions, children, and aged people.

A powerful restorative for all ailments of the stomach, stimulates general nutrition. Is retained when the stomach rejects all other food. Pleasant to taste.

Of all Chemists and Wholesale Houses.



**LIFE'S  
RESTORER.**

**—  
FINEST  
CONSOMMÉ.**

**HIGHEST POSSIBLE  
HONOURS.**

PARIS EXHIBITION, 1889  
FOOD  
AND COOKERY EXHIBITION,  
LONDON, 1889;  
&c., &c., &c., &c., &c.



**LIQUID EXTRACT OF BEST FRESH BEEF.**

A happy thought does not alone constitute a perfect invention; simplicity is needed to make it perfect.

"MAGGI" possesses this quality in a degree that renders it as indispensable in the kitchen as salt and pepper.

"MAGGI" is simply liquid EXTRACT OF BEEF, a teaspoonful of which, added to a cup of hot or cold water, makes at once a perfect BEEF TEA, which anyone, sick or well, will relish.

Two tablespoonfuls to a quart of water (adding Vegetables, &c.) will make a better Soup or Potage than hours spent over the fire.

The improvement in the quality of Gravies, Ragoûts, Stews, Hashes, Roasts, &c., by the addition of a few drops of "MAGGI," is amazing.

Unlike all other Extracts of Meat, "MAGGI" is most delicious, does not need the addition of salt and pepper, can be used by the most inexperienced, produces as good a Consommé or perfect Clear Soup as any first-class cook can prepare by the most elaborate and expensive means, and keeps good in any climate.

Soup Stock is now rendered unnecessary, as "MAGGI" is better, cheaper, and more nutritious for the sick, convalescent, and healthy.

**In 2-oz., 1-lb., & 2-lb. Bottles,** of all Grocers and Druggists throughout the world.

**Wholesale Agents—E. Lazenby & Son; Samuel Hanson, Son & Barter; W. & D. Harvest; Crosse & Blackwell.**



**TOWER TEA**  
OBTAINED THE  
**HIGHEST AWARD**

FOR TEA AT THE

**PARIS EXHIBITION.**



PRIZE MEDAL, PARIS, 1889.

To avoid imposition see that the trade marks (a Tower, with the word "Strength" across it, and "Tower Tea") are on every package, without which none is genuine.

WHERE VACANCIES EXIST AGENTS ARE  
APPOINTED BY



PRIZE MEDAL, PARIS, 1889.

**THE GREAT TOWER STREET TEA CO., LIMITED**  
**5 JEWRY STREET, LONDON, E.C.**



EIGHT PRIZE MEDALS AWARDED

**GOODALL'S  
HOUSEHOLD  
SPECIALITIES.****YORKSHIRE RELISH.**

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each.

**GOODALL'S BAKING POWDER.**

The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

**GOODALL'S EGG POWDER.**

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

**GOODALL'S CUSTARD POWDER.**

Delicious Custards without Eggs. In Boxes, 2d., 6d., and 1s. each.

**GOODALL'S BLANCMANGE POWDER**

Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

**GOODALL'S QUININE WINE, B.P.**

Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

**GOODALL'S GINGER-BEER POWDER.**

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

**GOODALL'S BRUNSWICK BLACK.**

For Painting Stoves, Grates, Iron, Tin, &amp;c. 6d. and 1s. Bottles.

**GOODALL'S LAVENDER WATER.**

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

**GOODALL'S PLATE POWDER,**

For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and 2s.

**GOODALL'S JELLY SQUARES,**Make a Delicious and Nutritious Jelly. In  $\frac{1}{2}$ -pint, 1-pint, and Quart boxes, 3d., 6d., and 1s. each.  
boxes, 3d. and 6d. each.

PROPRIETORS—GOODALL, BACKHOUSE &amp; CO., LEEDS.

**PATENT MEDICINES  
AND  
DRUGGISTS' SUNDRIES.**

Monthly Price List of Patent Medicines, Druggists' Sundries, &amp;c., will be sent post free on application to

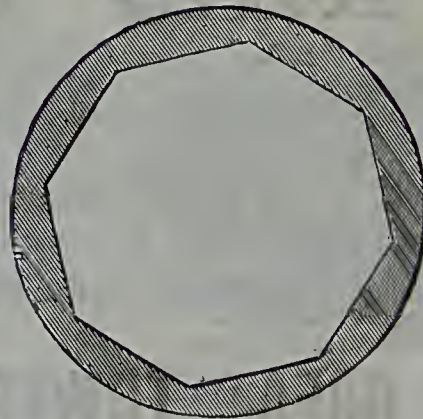
**GOODALL, BACKHOUSE & CO., LEEDS.****JAMES VIDIE ET FILS,**

Pantin Glass Works,

PATENTEES OF THE

**OCTAGONAL  
SYPHON.**

SECTIONAL VIEW.



SOLE AGENT:

**C. MELIN, 37 CRUTCHED FRIARS, LONDON, E.C.**

The "Octagonal" is externally similar to the ordinary Syphon, the interior being blown [of an octagonal shape by a new patent process.

Gives a most brilliant and sparkling appearance to the contents, and can resist double the pressure of ordinary Vases. Greatly recommend our new tint, "AZURE BLUE," which is the best tint for Syphon Vases.

Sample  
sent on  
receipt of  
**2/-**Sample  
sent on  
receipt of  
**2/-**TO BE HAD OF  
ALL MINERAL WATER ENGINEERS.TO BE HAD OF  
ALL MINERAL WATER ENGINEERS.



**Coca  
Coca  
Coca  
Coca**



**Tablets  
Lozenges  
Elixir  
Tea**

A Pamphlet will be forwarded to any applicant containing the testimony of eminent British and Foreign Medical Authorities to the invaluable properties of the Coca Preparations.

**RETAIL PRICES.**—Coca Tablets and Lozenges in boxes, **1/-, 2/6, & 4/-** per Box; Coca Elixir, **3/-** per Bottle; Coca Tea in tins of 1 lb. **4/-**,  $\frac{1}{2}$  lb. **2/-**,  $\frac{1}{4}$  lb. **1/-**.

## MENTHOLIN SNUFF.

This is a Perfect Remedy for Coriza or Cold in the Head. It is a powder taken as snuff, and is prepared from the OIL OF MINT principally, together with ingredients from other healing herbs. To all the disorders resulting from a cold, this snuff is an effectual antidote.—See *C. & D.*, Jan. 18, p. 69.

Retail, **1s. 1½d.** per Box, by Post **1s. 3d.**

## COCA TOBACCO.

We take this opportunity of thanking the numerous Chemists all over the Kingdom who patronised us and sold our Coca Tobaccos. We now beg to inform them and the Trade generally that, the difficulty with the Customs having been satisfactorily settled, we are now prepared to execute all orders entrusted to us for these Tobaccos, with our other preparations of Coca (as above), which are now commanding a ready sale.

**COCA TOBACCO, Mild, Medium, and Strong** .. .. . **12/- per lb.**  
USUAL WHOLESALE DISCOUNT. CAN BE OBTAINED FROM ALL WHOLESALE HOUSES.

**THE FRENCH HYGIENIC SOCIETY OF LONDON, 6 CONDUIT STREET, LONDON, W.**  
**REGENT STREET, LONDON, W.**

**T. & F. J. TAYLOR'S**



**AERATED WATERS,**

*Newport Pagnel.*

ESTABLISHED 1835.

**SODA, POTASH, SELTZER, AERATED (without Alkali), and LITHIA WATERS, LEMONADE AND GINGER ALE.**

*Each Bottle is protected by a Label bearing the Signature of the Firm.*

Purity and Excellence of the Water certified by Analysis by Professor ATTFIELD, Ph.D., F.C.S.

**FOR FILTERS**

Perfect in Mechanical and Chemical Action, Reliable Durable, Easily Cleaned.

**LIPSCOMBE, OXFORD STREET, LONDON, W.**

Makers to the Royal Family,

Original & sole inventor of the celebrated improved Filter

The ONLY GENUINE are made SOLELY by the Sons of the late Mr. Lipscombe. As there are watches and watches, so there are Filters and Filters, and the Trade are Cautioned against feeble Imitations of Lipscombe's Filters. To avoid grave disappointment, address—

**LIPSCOMBE, OXFORD STREET, W.**

*This Caution is necessary as we have no connection with any other Firm TRADING under the same name—Caveat Emptor.*

**A WONDERFUL SUCCESS!!**

**NON-INTOXICATING BEER**

Made from MASON'S Original

**EXTRACT of HERBS**

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound  
**ENLARGEMENT OF SIZE.**

A Sixpenny Bottle makes EIGHT GALLONS of

**HERB or BOTANIC BEER**

A NON-INTOXICATING BEVERAGE

Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

**BEWARE** of mean and fraudulent imitations.

**BEWARE** of others copying our title.

**MASON'S** is the original and only genuine.

**MASON'S** is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1/, & 2/ each, with directions.

**MASON'S WINE ESSENCES**

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.

These are having a very large sale now, and are extensively advertised.

Sold in Bottles at 6d., 1s., and 2s. each.

Quotations on application.

SOLE INVENTORS & MANUFACTURERS:

**NEWBALL & MASON,**  
Manufacturing Chemists and Botanic Druggists, NOTTINGHAM



# "LA JOYA" CIGARS.

See C. & D. Diary, p. 104.

## HUGO BROWN & CO.

41 Ormond Street, LIVERPOOL,

SOLE AGENTS IN EUROPE FOR LIEBIG'S

## EXTRACT OF BEEF

MADE BY

MESSRS. A. SANTA MARIA & CO.  
PAYSANDU.

Sold as imported in cases of two tins each, weighing together about 112 lbs.

## CIGARS, ETC.

At the Lowest Wholesale Prices.

La Juana .. .. 10/6 per 100, Sold at 2d. each.  
La Trafalgar .. .. 15/0 .. .. 3d. ..  
El Sol Habaners, } 22/ per 100, Sold at 4d. each.  
Havannah 1885 Crop }  
&c. &c. TOBACCO, CIGARETTES, &c.

Samples on receipt of 1s. 6d. in Stamps.

## BEWLAY & CO., LTD.

Tobacco Manufacturers and Cigar Importers,

49 STRAND, and at 143 CHEAPSIDE, LONDON.  
ESTABLISHED OVER 100 YEARS.

## This First-class Brand of English Cigars

IS MANUFACTURED SOLELY BY

## M. & R. PEACOCK,

542 KINGSLAND ROAD, N.E.

Sample box of 25 Post Free for 5s.  
Postal Order.

WHOLESALE PRICE LIST TO LICENSED  
DEALERS ON APPLICATION.

## TO ESSENCE MAKERS. ORANGE AND LEMON PEELS (DRIED and FRESH).

This Season's Peel is now ready, and we are prepared to supply Fresh Orange and Lemon Peels specially cut (free from pith), in small shreds about  $1\frac{1}{2} \times \frac{1}{8}$ ", in a condition most favourable for the manufacture of Essences and the Official Tinctures.

Samples will be sent free on application.

## "EXCELSIOR" TABLE JELLIES

IN CARDBOARD BOXES,

Of  $\frac{1}{2}$ -Pint, Pint, and Quart Size, packed in Wood Boxes free.  
 $\frac{1}{2}$ -Pints, 1/9 per doz. : Pints, 3/3 per doz. : Quarts, 6/ per doz.



FLAVOURS:

Orange, Lemon, Calves' Feet, Vanilla, Raspberry, Noyeau, Cherry, Strawberry, Pineapple, and Black Currant.

## CHAS. SOUTHWELL & CO.

DOCKHEAD, LONDON, S.E.

# "MYRTLE GROVE" TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and  $\frac{1}{4}$ ,  $\frac{1}{2}$ , 1 lb. Tins only.



## TADDY & CO., 45 Minories, LONDON

ESTABLISHED 150 YEARS,

## SNUFF, TOBACCO, AND SEGAR MANUFACTURERS.



Write for List of Specialities.



**TYRER'S**

**MENTHOL**



PEDESTAL.

1d. sizes



BOTTLE.

6s. gross



VASE.

# INFLUENZA

CURED BY

## MENTHOL.

Dr. LENNOX BROWNE says:—"It kills the microbe of infection."—*Vide MEDICAL PRESS AND CIRCULAR*, January 8, 1890.

2d. Size, as Fig. A, 12s. gross, stained and varnished, all put on  $\frac{1}{4}$ -gross cards with ELASTIC. Sample free.



FIG. A.

PETER TYRER, 70 LONG LANE, BOROUGH, LONDON, S.E.

# PASCALL'S GOLDEN MALTEX

PATENTED.

Contains 25% of Allen & Hanburys' Extract of Malt.

A NOVEL CONFECTION. MOST SALEABLE.

Delicious Flavour. Brilliant & Attractive Appearance.

**SELLS AT SIGHT.**

*Vide Dr. Tanner's Report, and The Chemist and Druggist*, April 20th.

1/ Bottles, 9/ per doz.; 1-lb. Bottles, 20/ per doz.; and in 4-lb. Jars, 1/6 per lb.

HANDBILLS POST FREE ON APPLICATION.

OF ALL WHOLESALE HOUSES, OR OF THE MANUFACTURER,

JAS. PASCALL, BLACKFRIARS ROAD, LONDON, S.E.

# SANTHA.

A Digestive EXTRACT OF TEA, made instantly in Cup or Teapot.

The injurious action of tea upon the digestion is due to the tannin it contains; and as this dissolves instantly in hot water, no method of infusion can keep it out. Santha is the only form of tea that has no action upon either food or membranes; and it is not bilious like eocoon and ecfee. The *Lancet* of May 4th, 1889, says:—"The aroma and the caffeine are preserved, and the tannin is neutralised and rendered innocuous." The *London Medical Recorder* of Feb. 20th, 1889, says:—"Santha possesses the aromatic and stimulating qualities of the crude leaf, minus its astringency. The *Illustrated Medical News* of August 31, 1889, says:—"We can recommend it as the most digestible and palatable form of tea yet submitted to us."

Santha is the only Tea suitable for Weak Digestions. Of Chemists, &c., 1s., 2s. 6d., and 6s.; or by post from works, 2d. extra.

SANTHA TEA COMPANY (LIMITED), Penarth Street, Hatcham, S.E.

Wholesale Agents—BARCLAY & SONS, Farringdon Street, E.C.

"RAMORNIE."

# LIEBIG'S Extract of Meat.

As supplied to the Admiralty, War, and India Offices.

1-lb. Jars..... per lb.	8/9	per doz.	81/0	2-oz. Jars..... per lb.	7/8	per doz.	11/6
1-lb. Jars.....	7/0	"	42/0	1-oz. Jars.....	8/4	"	6/8
1-lb. Jars.....	7/8	"	21/9	1-oz. Jars.....	8/8	"	8/8

QUOTATIONS FOR EXTRACT IN "BULK" ON APPLICATION.

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C.

6 lbs. Carriage Free.



# "PUMILINE."

EXCLUSIVELY OBTAINED FROM



THE SNOW-GROWN ITALIAN PINE

## PUMILINE ESSENCE

Is a specially prepared volatile essence, distilled from a particular variety of pine, growing nearest the snow level on the Alps. It possesses exceptional medicinal properties when given internally, or in the form of inhalations, in the treatment of Pulmonary and Diathetic Affections, such as Phthisis, Rheumatism, Gout, &c. It is a valuable deodorizer and disinfectant, and has a peculiarly refreshing and fragrant odour.

## PUMILINE JUJUBES

For Sore Throat, Cough, Hoarseness, &c., they give immediate relief.

## PUMILINE LINIMENT

Specially beneficial for use in Chronic Rheumatism, Gout, Lumbago, Sciatica, &c. It is also invaluable for Throat and Chest Affections, and may be taken internally, in doses of 2 to 5 drops.

## PUMILINE PLASTER

Is most effective in Chronic and Muscular Rheumatism, Lumbago, Sciatica, and also for Chest Affections.

## PUMILINE EXTRACT

For Gout, Rheumatism, and Skin Disease; used in BATHS, Ointments, and Liniments.

## PUMILINE OINTMENT

For all Skin Affections, Irritations, Insect Bites, Burns, &c. This Ointment is a fine smooth homogeneous application. It gives immediate relief in the intolerable itching of Eczema, &c. It is unrivalled both as a medicinal agent and toilet requisite.

## PUMILINE SOAP

Is a carefully neutralised superfatted Soap, containing no free alkali, and is a Lubricant instead of a Desiccant to the skin. It is peculiarly adapted for use to the delicate skin of ladies and children. It leaves the skin smooth and satiny, and beautifies the complexion. The Pumiline Essence which it contains makes it a powerful disinfectant.

## PUMILINE DRY INHALER

Most effective and convenient pocket inhaler for use in Throat or Lung Troubles. Is invaluable for use during a fog or mist.

G. & G. STERN have so arranged their Price List that a *very large margin of profit* is left to Chemists and to the Trade generally. In consideration of this, as well as the fact *that no other* Pine Preparations are in any way equal to STERN'S PUMILINE, Chemists will find it much to their advantage to stock the Pumiline Preparations.

### PRICES—

	RETAIL	WHOLESALE
PUMILINE ESSENCE .....	1/6 and 2/6 per bottle.....	15/ and 24/ per dozen.
PUMILINE EXTRACT .....	1/ per bottle.....	9/ per dozen.
PUMILINE JUJUBES .....	1/1½ and 2/3 per box .....	10/6 and 20/ per dozen.
PUMILINE OINTMENT .....	1/1½ and 2/9 per pot.....	11/ and 27/ per dozen.
PUMILINE LINIMENT .....	1/1½ and 2/9 per bottle .....	11/ and 27/ per dozen.
PUMILINE SOAP...(box of 3 cakes).....	1/6 and 9d., and 1/ per tablet.....	15/, 7/6, and 9/ per dozen.
PUMILINE PLASTER .....	1/1½ each .....	9/ per dozen.
PUMILINE DRY INHALER .....	1/6 each.....	14/ per dozen.

BESIDES WHICH AN ADDITIONAL DISCOUNT IS ALLOWED TO CHEMISTS AND THE TRADE.

**G. & G. STERN, 62 Gray's Inn Road, LONDON, W.C.**

Will send Show Cards and Literature Free on Application.



Telephone Number, 1852.

Telegraphic Address—CHEMICUS LONDON.

## ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

**NOTE.**—The Folios shown in this Index are those at the FOOT of the Page, and not at the Top. This arrangement is necessary in order to meet the requirements of the Post Office.

Foot of Page	Foot of Page	Foot of Page	Foot of Page
Alofas Co. .... 54	Evans, Sons & Co. .... 37, Cover	Liverpool School of Pharmacy, The. .... 5	Rich, E. C. Co. .... 34
Anderson & Adams ..... 4	Evans & Soos (Lim.) .... 37, Cover	Lloyd, Mrs. A. S. .... 27	Ricqlès & Cie. .... 34
Anglo-American Oil Co. (Lim.) 51	Evans, Lescher & Webb, London Cover	Lothouse & Saltmor. .... 38	Robbins, J., & Co. .... 43
Apollinaris, The, Co. .... Cover		London Hospital and Medical School ..... 5	Robinson, B. .... 14
Austin & Co. .... 49	Felton, Grimwade & Co. .... 35	Lorenz, H. .... 54	Rocke, Tompsett & Co. .... 35
Australian Drug Co. .... 32	Ferris & Co. .... 31	Luneberger Wax Bleaching Works ..... 54	Sanders, H. G., & Sons. .... 27
Australian Meat Co. .... 19	Fink, F., & Co. .... 54	Lynch & Co. .... Cover	Sauford & Son. .... 54
Baelz, R., & Co. .... 40	Fitch & Nottingham. .... 46	Macfarlan, J. F., & Co. .... 38	Sauger & Sons. .... 8
Barnett & Foster. .... 12	Fox, W., & Sons ..... 43	Macnair, J. & L., & Co. .... 50	Sanitas, The, Co. .... Text 222
Barron, Harveys & Co. .... 42	French Hygienic Society ..... 17	"Maggi" ..... 15	Santha Tea Co. .... 13
Battle, J. R. .... 53	Fuerst Bros. .... 27	Manchester College of Chemistry and Pharmacy ..... 5	School of Pharmacy, The. .... 6
Beach, J., & Sons ..... 54	Gent & Co. .... Text 222	Marion & Co. .... 30	Seabury & Johnson ..... 45
Beecham, T. .... 44	Gibson R., & Son ..... 6	Maw, S., Son & Thompson ..... 5	Squalls (Lim.) ..... 24
Berry, F. H. .... 8	Goodall, Backhouse & Co. .... 16	May & Baker. .... Cover	Shirley, A. W. .... 26
Bewlay & Co. .... 18	Goodall, E. F. .... 46	May, Roberts & Co. .... 44	Silicated Carbon Filter Co. Text 222
Billaut ..... 36	Goodall, E. F. .... 46	McKesson & Robbins ..... 4	Simon, J. .... 25
Blondeau & Cie. .... 56	Great Tower Street Tea Co. .... 15	Melin, C. .... 16, 45	Smith, Sam. .... 37
Bowling & Govier ..... 48	Greenwood, S. ....	Miller, A., & Co. .... 12	Smith, Stephen, & Co. .... 50
Braggi, P., & Co. .... 52	Coloured Supplement	Möller, P. .... 57	Smith, T. & H., & Co. .... 33
Bratby & Hinchliffe (Lim.) .... 13	Hamilton & Co. .... 45	Moss, J., & Co. .... Text 222	Soul, W. H., & Co. .... 32
Brett, F. J. Coloured Supplement	Hargreaves, Dr., M.D. .... 5	Mouilla Liquid Soap Co. (Lim.) 54	Southwell, Chas., & Co. .... 18
Brown, Hugo & Co. .... 18	Harker, O. R., Stag & Morgan 40	Mumford, G. S. .... Text 222	Sprone, The, Co. .... 55
Burroughs, James ..... 46	Hockin, Wilson & Co. .... 25	Muter, Dr. .... 6	Spratts Patent (Lim.) ..... 53
Burroughs, Wellcome & Co., 29, 30	Holloway, P. .... 46	Natal Drug Co. (Lim.) ..... 34	Steedman, J. .... 24
Bush, W. J., & Co. .... 11	Hooper, W., & Co. .... Cover	Natali, E. .... 43	Steiner E., & Co. .... 52
Bygrave, J. & W. .... 48	Horn & Son ..... 54	Newball & Mason ..... 17	Stern, G. & G. .... 20
Cadbury Bros. .... Cover	Howenden & Sons ..... 26	Newbery, F., & Sons ..... 23	Summer, R., & Co. .... Cover
Chanteand, G. .... 34	Howlett, S. .... 49	Oldfield, Pattison & Co. .... 3	Swift Specific Co., The ..... 30
Churchill, J. & A. .... 5	Isaacs, I., & Co. .... 49	Orme & Co. .... 8	Taddy & Co. .... 13
Clark, S., & Co. .... 46	Jewsbury & Brown ..... 27	Pascall, J. .... 19	Taylor, T. & F. J. .... 17
Olav, Dod & Co. .... 42	Jeyes' Sanitary Compound Co. (Lim.) ..... Text 222	Peacock, M. & R. .... 18	Taylor, J. N. .... 54
Cocking & Co. .... 35	Johnsen & Jorgensen ..... 7	Peake, Allen & Co. .... 34	Towle, E. T. .... 40
Colthurst & Harding ..... 52	Johns, W. .... 37	Penny Quinine ..... 45	Treble, G., & Son ..... 43
Critchley, T. .... 54	Keith, B., & Co. .... 34	Peterson, M., & Co. .... 6	Typke & King ..... 43
Curtis & Co. .... 40	Kemphorne, Prosser & Co. .... 36	Phillips, G., & Co. .... 50	Tyrer, P. .... 19
Cyclostyle Co., The. .... 6	Kennedy, The, Co. .... 55	Pronk, Davis & Co. .... 50	Vaccine Association ..... 49
Da Silva & Co. .... 54	Kilner Bros. .... 47	Prosser, Taylor & Co. .... 33	Van Houten's Cocoa ..... 31
Davy, Humphrey, & Co. (Lim.) 37	King, F., & Co. .... 14	Pure Malt Extract Co. .... 9	Vogeler, Charles A., The, Co. .. 23
Day & Sons ..... 52	Kuhn, B. .... 33	Quilliam, J., & Co. .... 54	Warrick Bros. .... 45
Day, Son & Hewitt ..... 52	Lakeman, J. J. .... 54	Radams' Microbe Killer Co. (Lim.) 36	"W" Brand Bottles ..... 49
Dee Oil Co. .... 24	Lalor, Dr. .... 36	Rankin & Borland ..... 37	Wilkinson, A., & Sons ..... 14
Denaeyer's Peptone Co. .... 14	Lennon, B. G., & Co. .... 35	Rankin & Sons ..... 55	Wood, Vincent ..... 45
De St. Dalmaz, E. A. .... 55	Leo & Co. .... 43		Wright, Layman & Umney Text 222
Dinneford & Co. .... 37	Levico Natural Mineral Water 12		Wright, W. V., & Co. .... 30
Dukes, B. .... 8	Levy, Julius. .... 34		Wyleys & Co. .... 41
Dunn, W. G., & Co. .... 54	Lincoln and Midland Counties Drug Co. .... 43		Young, H. .... 24
Durrant, G. .... 54	Lipscombe & Co. .... 17		Zimmermann, A. & M. .... 39
Edwards, W., & Son ..... 42	Liverpool Lint Co. .... 4		Zuccato & Wolf. .... 6
Egrot ..... 12			
Elliman, Sons & Co. .... Text 222			

## CLASSIFIED LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear above are published in one of the other issues of this month.

## AERD &amp; MINERALS

Apollinaris (Hungarian)  
Aperient Water, Diamond  
Mark, Friedrichshall  
Apollinaris)  
Barnett and Foster  
Chemists' Astringent Waters  
Association.  
Ellis (Rothin)  
Hassall and Co. (Oitic Acid  
Phospho)  
Hay, W.  
Idris and Co.  
Jewsbury and Brown  
Kilmound and Co.  
Levico Springs Co. (Limited)  
Mills and Co. (Bourne)  
Taylor, T. and F. J.  
(See GINGER ALE.)

## DITTO PLANT

(See SPONGES and ESSENCE.)  
Barnett and Foster  
Bratby and Hinchliffe (Ld.)  
Egrot  
Favarger and Co.  
Favre, T.  
Gnaret Frères  
Prudon and Dubost  
Tyler, Hayward, and Co.

## ACETIC ACID

Dunn and Co.  
Fuerst Bros.  
Morris and Gallard (Salts)

## ALKALOIDS

Howards and Sons (Cinchona)  
Smith, T. and H., & Co.

## ALMANACKS

Blake and Mackenzie  
Silverlock, H.

## AGENCIES ABROAD

Acard, Ed.  
Australian Drug Co.  
Bolsay  
Cocking and Co. (Japan)  
Felton, Grimwade and Co.  
(Melbourne)  
Fongera and Co. (New York)  
Kemphorne, Prosser & Co. N.Z.  
Lennon, B. G., and Co.  
Lavy, Jules  
Natal Drug Co. (Limited)  
Peaks, Allen and Co.  
Prosser, Taylor and Co.  
Rish, E. C., Co.  
Roberts (Paris, &c.)  
Rocke, Tompsett and Co. (Melbourne)  
Sharland and Co.  
Soul, W. H., and Co.

## AMMONIA

May and Baker.  
Whites, A., and Sons  
Woolley, Sons and Co.

## APPARATUS

Clarke, S. (Food Warmer and  
Bed Tray)  
Egrot  
French Nickel Manufacturing  
Co.  
Orme (Scientifics)  
Parker, Son and Rayment  
Tebbutt, F.  
Wedgwood & Sons (Mortars)

## BANDAGES

Bailey, W. H., and Son  
Robinson and Sons  
Seabury and Johnson

## BAKING POWDER

Dunn, W. G., and Co.  
Goodall, Backhouse & Co.

## BEESWAX

Bowdlear, W. H., and Co.  
Luneberger Wax Bleaching  
Works

## BICARB. SODA

Brunner, Mond and Co., Lim.  
Howards and Sons  
May and Baker

## BISMUTH, PREP.

Hearon, Squire and Francis  
Hewlett and Sons  
Howards and Sons  
May and Baker  
Bynes and Co.  
White, Alfred, and Sons

## BLOOD MIXTURE

Lincoln and Midland Counties  
Drug Co.

## BOOKS

Churchill, J. and A.  
Hargreaves, Dr.  
Muter, Dr.

## BOTANIC BEER

Newball and Mason

## BRUSHES

Dukas and Co.  
Fordham, W. B., and Sons  
(Lim.)  
Kent, G. B., and Sons  
Moseley, David, and Sons

## BOTTLE CAPPING

Boach, J., and Sons  
Hunt, W. F., and Co.

## BOTTLES

Alre and Calder Bottle Co. (Ld.)  
Barnett and Foster  
Barrett, E. H.  
Bratby and Hinchliffe (Ld.)  
Brett's (Lim.)  
Evans, Sons and Co.  
Gilbertson, H., and Sons  
Hearn, E. A., and Co.  
Hunt, W. F. (Oaps)  
Isaacs and Co.  
Kilner Bros.  
Melin, C. (Stoppers)  
Pothe, H., and Co.  
Sanders, H. G., and Son  
Shirley, A. W.  
Toogood, W.  
Youldon, E.  
"W" Brand

## BOXES

Austin and Co. (Cardboard)  
Ayrton and Saunders  
Chalmers, W. B.  
Owen, J., Jr.  
Parmenter, I. W., & Co. Lim.  
Robinson and Sons

## BUTTER COLR, &amp;c.

Johnsen and Jorgensen  
Oldfield, Paterson and Co.

## CAMPHOR

Fuerst Bros.  
Howards and Sons  
Keene and Ashwell (Homopo-  
pathic)

## CAPSULES

(METALLIC)

Batts and Co.  
Brooks, Psel and Co.  
Malin, O. (Macchine)  
Sanders, H. G., and Son

## CAPSULES

Denonal, J. (Medisinal)  
Duncan, Flockhart and Co.  
Evans, Sons and Co.  
Hooper, B., and Co.  
Maw, S., Son and Thompson

## CSCEA SAGRADA

Duncan, Flockhart and Co.  
Evans, Sons and Co.  
Ferris and Co.  
Moses, J., and Co.  
Squire and Sons

## CASTOR OIL

Fuerst Bros.

## CATALOGUE

Evans, Sons and Co.  
Maw, Son and Thompson, S.  
May, Roberts and Co.  
Sanger and Son  
Schutze, F., and Co.

## CEMENT

Kay Bros. (Lim.)

## CHALK PRECIP.

Dunn and Co.  
Leversmore, Aug., and Co.  
White, A., and Sons

## CHEST PROTECTRS

Bailey, W. H., and Son  
Evans, Sons and Co.  
Liverpool Lint Co.  
Lynch and Co.  
Sanger and Sons  
Schutze, F., and Co.  
Thompson, Walters, Hole and  
Co. (Limited)  
Wood, Vincent



**CHEMICALS**

Andres, Oscar and Co.  
Boehringer, C. F., and Sohne  
Bramwell and Son  
Brunner, Mond and Co., Lim.  
Bush, W., Son and Co.  
Dunn and Co.  
Fletcher Fletcher and Stevenson  
Fuerst Brothers  
Goodall, Backhouse and Co.  
Gress, R. W., and Co.  
Hill, A. S., and Son  
Hodgkingsone, Treacher and Clarke  
Howards and Son (Pharm.)  
Kuhn, B.  
Levermore, Ang., and Co.  
Lofthouses and Saltmer  
Lorenz, H.  
May and Baker  
Morris and Oallard  
Moes and Co.  
Prunk, Davis and Co.  
Stern, G. and G. (Pnniline)  
Smith, T. and H., and Co.  
Tytkie and King  
White, A., and Sons  
Zimmermann, A. and M.

**CHLORIDE OF GOLD**

Rowland, L.

**CHL. OF POTASH**

Burroughs, Wellcome and Co.  
Hooper, B., and Co.

**CHLORIDE OF LIME**

Government Sanitary Co.  
National Chemical Co.

**CHLORODYNE**

Davenport (Brown's)  
Towle, A. P., and Son

**CHLOROFORM, &c.**

Duncan, Flockhart and Co.  
Macfarlan, J. F., and Son  
Smith, T. and H., and Co.  
Wright, Layman and Umney  
Zimmermann, A., and Son

**CITRIC ACID**

Hasealls (Phospho)

**COCAINE-HYDRO.**

Boehringer, C. F., and Sohne  
Howards and Sons

**COCA WINE**

Armbrrecht, Nelson and Co.  
Evans, Sons and Co.  
French Hygienic Soc.

**COCA & CHOCOLATE**

Oadbury Bros  
Fry and Sons  
Bowntree and Co.  
Van Houten's Cocoa

**COD-LIVER OIL**

Allen and Hanbury  
Burroughs, Wellcome and Co.  
Evans, Sons and Co.  
Hill, A. S., and Son  
Moller, P.  
Lofthouses and Saltmer  
Oppenheimer Bros. and Co.  
Smith, T. J.  
Woolley, Sons and Co.  
Wright, Layman and Umney

**COFFEE**

Symington and Co. (Coffee  
Essences)

**COLPSIBLE TUBES**

Betts and Co.  
Brooks, Peel and Co.  
Sandere, H. G., & Son

**COMP. MEDICINES**

Allen and Hanbury  
Blyton, Astley and Co.  
Burroughs, Wellcome and Co.  
Fuerst Bros.  
Hooper, B., and Co.  
Leo and Co.  
Wyllys and Co.

**CONFECTIONERY**

Blyton, Astley and Co.  
Gibson, E., and Sons  
Kerfoot, T.  
Pascall, J.  
Warriock Brothers

**CONCENT. LIQS.**

Evans, Sons and Co.  
Fletcher, Fletcher & Stevenson

**CORN CURES**

Seabury & Johnson (Plasters)  
Thompson, M. F.  
Young, H.

**COTTON WOOL**

Haynes, G., & Co. (Absorbent)  
Robinson and Sons (Absorbent)  
Sanger, J., and Sons  
Seabury and Johnson

**CRSED LINSEED**

Mumford, G. S.

**DISINTEGRATORS**

Carter, J. H.

**DOG MEDICINES**

Spratts (Patent)

**DENTIFRICES**

Fentiman & Co.  
Jewsbury and Brown  
Kennedy, The Co.  
Lakemaa, J. J.  
Newbery and Sons  
Reeb, H.  
Rinton, O., and Co.  
Thompson and Capper  
Warriock Bros.  
Woods, W. (Aroon Nut)  
Wright, O., and Co.

**DISINFECTANTS**

Government Sanitary Co.  
Hamilton and Co.  
Jeyee' Sanitary Compounds  
National Chemical Co.  
Seabury and Johnson  
Sanitae Co.

**DRUGGISTS' SUN.**

Ayrton and Saunders  
Bailey, M., and Co.  
Karolav and Sons (Limited)  
Davy, Humphrey, & Co.  
Evans, Laseber, and Webb  
Evans, Sons, and Co. (Ravara)  
Gilbertson, H., and Sons  
Hill, A. S., and Son  
Hookin, Wilson and Co.  
Laris and Co.  
Kay Bros., Lim.  
Lynch and Co.  
Marriot, E., and Co.  
Maw, Son and Thompson, S.  
May, Roberts and Co.  
Barton and Sons (Cork Mats)  
Sanger and Sons  
Schutze and Co.  
Thompson, Walters, Hole & Co.  
Toogood, W.  
Wood, Vincent

**DRUMS, CANS, &c.**

Noake and Co.

**EAU DE COLOGNE**

Farina, J. M.

**ELASTIC HOSIERY**

Wood, V.

**ELECTRIC APPAR.**

Berry, F. H.  
Darrall, F., and Co.  
Gent and Co.  
Orme and Co.

**EMBROCATION**

Elliman, Sons and Co.

**ENAMEL**

Fordham, W. B., and Sons

**ENEMAS**

Bailey, W. H., and Son  
Evans, Sons and Co.  
Ingram and Son  
Lynch and Co.  
Sanger and Son  
Schutze, F., and Co.

**ENGRAVERS**

Barker, W., and Son  
Coursan, J. R. (Glasses)

**ESSENTIAL OILS**

Bush, W., Son and Co.  
Cocking (Japan Peppermint)  
Cummock, J.  
Duckworth and Co.  
Evans, Sons and Co.  
Fitzsimmons and Fearnley  
Frattelli de Paquala and Co.  
Hodgkingsone, Treacher and Clarke  
May and Baker  
Stevenson and Howell  
Symms and Co.  
Tombarel Freres  
Treat, R. O.  
Warriock Brothers  
Wright, Layman and Umney  
Vogt, G., and Co.

**ESSENCES**

Beckett, W.  
Brady and Hinchliffe (Ld.)  
Burgoyne, Burdighes and Co.  
Buch, W. J., and Co.  
Cummock, J.  
Duckworth and Co.  
Fitzsimmons and Fearnley  
Goodall, Backhouse and Co.  
Hay, W.  
Hill and Co.  
May and Baker  
Oldfield, Pattinson and Co.  
Stevenson and Howell  
Tyrer, P. (Anchovies)  
Woolley, Sons and Co.

**ETHER**

Claudon, G.  
Duncan, Flockhart and Co.  
Howards and Son  
May and Baker  
Robbins  
White, A., and Sons  
Woolley, Sons and Co.  
Wright, Layman and Umney

**EXTRACTS, FLUID**

Allen and Hanbury  
Barber, G., and Co.  
Burgoyne, Burdighes and Co.  
Evans, Sons and Co.  
Fischer, Fletcher & Stevenson  
Hearson, Squire and Francis  
Hopper, H., & Co.  
Moes and Co.  
Potter and Clarke  
Wright, Layman and Umney

**EXTRACT, MEAT**

Australian Meat Co.  
Bovril (Limited)  
Brand and Co.  
Brown, Hugo, and Co.  
Dessayer's Peptone C  
Liebig Co.  
"Maggi"

**EUCALYPTUS**

Downie B. I. P. Co.  
Tucker, J., and Co.

**FEEDING BOTTLES**

Brethite, E. and Co., Lim.  
Evans, Sons and Co.  
Hearn, E. A., and Co.  
Hookin, Wilson and Co.  
Kilner Bros.  
Marriot, E., and Co.  
May, Roberts and Co.  
Thompson, Walters, Hole and Co. (Limited)  
Toogood, W.

**FLY PAPERS**

Ford, Shapland and Co.

**FILTERINGS**

Doniton and Co.  
Lipscombe and Co.  
Silksted Carbon Filter Co.

**FOOD (Infants' & Invalids')**

Allen and Hanbury  
Baelz, R., and Co.  
Brand and Co.  
Brass, J. L. (Charcoal Biscuits)  
Goodall, Backhouse and Co.  
Hearson, Squire and Francis  
King, F., and Co., Lim.  
Liebig Co.  
"Maggi"  
Mottershead & Co. (Benger's Food)  
Needle, H.

**GINGER ALE**

Hay, W. (Essence)  
Kinnelord  
Mille, R. M., and Co.

**GLYCERINE**

Fink and Co.  
Fuerst Bros.  
Price's Candle Co.  
Van Geelkerken and Co.

**GRANULAR PREP.**

Curtie and Co.  
Hearson, Squire and Francis  
Hill, A. S., and Son  
Kerfoot, J.  
Wright, Layman and Umney

**GUM**

Fink (Arabic, &c.)  
Hyde, Nash and Co.  
Knight and Co.  
Levermore, Ang., and Co.  
Macnair, J. and D., and Co.  
Prunk, Davis and Co.

**GUTTAPERCHA**

Duncan, Flockhart and Co.

**HAIR PREP.**

Brodie, J. (Imperial Hair Dye)  
Cheesbrough Manfg. Co.  
Edwards and Co.  
Rosen Manufacturing Co.  
Truefitt, H. P. (Limited)

**HERB BEER BITS**

Newball and Mason  
Oldfield, Pattinson and Co.  
Potter and Clarke

**HERBALISTS**

Butler, McCulloch and Co.  
Newball and Mason (Extract of Herbs)  
Potter and Clarke (Extract of Herbs)  
Wilkinson, A., and Sons (Compressed Hope)

**HOMOEOPATHIC**

Keene and Ashwell  
Leath and Ross  
Thompson and Capper  
Watson and Waters

**HOPS**

Wilkinson, A., and Sons

**HOP ALEESSENCE**

Hay, W.

**HYPHOSPHITES**

Duncan, Flockhart and Co.  
Dunn and Co.  
Fellows  
Fletcher, Fletcher and Co.  
Symms and Co.  
Tytkie and King

**HOSPITALS**

Boltingbroke House  
London Homeopathia

**INHALERS**

Anderson and Adams  
Evans, Sons and Co.  
Godfrey and Cooks  
Hookin, Wilson and Co.  
Schutze, F., and Co.  
Toogood, W.

**INSECTICIDES**

Sanford and Co.  
Shorey, J. F.  
Steiner and Co.  
Vogt, G., and Co.

**INK [See MARKING]**

Bewley and Draper  
Duncan, Flockhart and Co.

**JELLIES (TABLE)**

Southwell, C., and Co.

**KETCHUP**

Tyrer, P.

**LARD**

Ewen J.

**LEECHES**

Fitch and Nottingham

**LIME JUICE**

Evans, Sons and Co.  
Idris and Co.

**LINT**

Liverpool Lint Co.  
Newsome, C.  
Robinson and Sons  
Seabury and Johnson

**LOZENGES**

Allen and Hanbury  
Blyton, Astley and Co.  
Gibson, E., and Sons (Mantra)  
Hill and Son  
Kerfoot, T.  
Pascall, J.  
Raines and Co.  
Randall and Son  
Warriock Bros.

**MACHINERY**

Bayer Freres.  
Burroughs, Wellcome and Co.  
Carter, J. H.  
Goodall, E. F.  
Holroyd & Co. (Limited)  
McFerran, J. A.  
Mellin, O. (Capsuling)  
Potifex and Wood  
Werner and Pfeiderer

**MAGNESIA**

Andreas, Oscar, and Co.  
Baelz, W., Son and Co.  
Kinnelord  
Henry, T. and W. (Calced)  
Hill and Sons, A. S.  
Kerfoot, T. (Citrate)  
Murray, Sir James, and Son

**MALT EXTRACT, &c.**

Baelz, R. and Co.  
Burroughs, Wellcome and Co. (Kepler's)  
Hearson, Squire and Francis  
Oppenheimer Bros. and Co.  
Pure Malt Extract Co.

**MARKING INKS**

Barber, G., and Co. (Crimson)  
Hodgkingsone, J.

**MEDICINE CHSTS**

Day, Son and Hewitt (Veterinary)  
Day and Sons (Veterinary)

**MENTHOL**

A1 Menthol Depot, A. W.  
Shirley, Proprietor  
Cooking and Co.  
Hookin, Wilson and Co.

**MERCURIALS**

Fuerst Brothers  
Howards and Sons  
May and Baker

**METHYLATED****SPIRITS**

Burrough, J.  
Harvey, J. & W., and Co.  
Jones and Co.  
Macnair, J. and D., and Co.  
Phillips, G., and Co.

**METHYLENE**

Robbins, J., and Co.

**MICROSCOPES**

Darton, F., and Co.  
Perken, Son and Rayment

**MILK**

Needle, H. (Condensed)

**MIXING****MACHINERY**

Carter, J. H.  
Werner and Pfeiderer

**MORPHIA**

Macfarlan, J. F., and Co.  
Smith, T. and H.

**OILS, PAINTS, &c.**

Anglo-American Oil Co. (Lim.)  
Colthurst and Harding  
Fox, W., and Sons  
Prunk, Davis and Co.

**OPTICIANS**

Darton, F., and Co.  
Perken, Son and Rayment

**OINTMENT BASES**

Burroughs, Wellcome and Co.  
Cheesbrough (Vaseline)  
Grindley (Petroleum Jelly)

**OPHTHALMIC**

Pomies, Dr.

**OTTO OF ROSE**

Fuerst Bros.  
Treat, R. C.

**PEPSINE, &c.**

Burroughs, Wellcome and Co.  
Fletcher, Fletcher & Stevenson  
Newbery (Ingilvin)  
Warner and Co. (Ingilvin)  
Zimmermann

**PAPAIN FINKLER**

Kuhn, B.

**PARALDEHYDE**

Zimmermann, A. and M.

**PATENT AGENTS**

Dukes, B.  
Horn and Son

**PATENT MEDICONS**

Alofas Co.  
Armbrrecht, Nelson and Co.  
Atkinson and Barber (Infant  
Preerv)  
Barclay and Sons (Limited)  
Beecham (Pille)  
Braggi and Co.  
Crouch, F. B. (Wafers)  
Da Silva and Co.  
Edwards and Son  
Evans, Lecher and Webb  
Fennings' (Powders)  
Goodall, Backhouse and Co.  
Groegurin, C.  
Holloway (Pills and Oint.)  
Invigorene Manufacturing Co.  
John's Liver Pille  
Kemp, W. H.  
Lalor (Phosphodyns, &c.)  
Lincoln (Clarke's Mix.)  
May, Roberts and Co.  
Newbery and Sons  
Rsdam's Microbe Killer Co.  
Roberts and Co. (Powder)  
Rosene Manufacturing Co.  
Sequah (Limited)  
Smith, Sam  
Swift's Specific Co.  
Vogler, The C. A. Co.  
Wilson, A. (Bunter's Nervine)

**PERFUMERY,****FANCY SOAPS**

Blondan and Co.  
Burroughs, Wellcome and Co.  
Cheesbrough Manufacturing Co.  
Chiswick Soap Co.  
Cook, E., and Co.  
Coward and Co.  
Dee Oil Co. (Limited)  
Durrant, Geo.  
Ewen (Soaps)  
Farina, J. M.  
Giraud Fils  
Greensill, T. S., and Son  
Mann, C. A., and Co.  
Mouilla Liquid Soap Co., Lim.  
Newbery and Sons' (Ravara)  
Osborn, Bauer & Cheesman  
Pearl Soap  
Price's Patent Candle Co.  
Rosene Manufacturing Co.  
Rouse & Co.  
Sainsbury, S. (Lav. Water)  
Shirley, A. W.  
Tsedman, J.  
Taylor, J. N.  
Treat, K. C.  
Truefitt, H. P. (Limited)  
Vigis, L.  
Violet  
Vogt, G., and Co.  
Warwick Brothers  
Wedlake, M.  
West, T. (Oak's Moss)  
Woolley, Sons & Co. (Powder)

**PETROLEUM**

Anglo-American Oil Co. (Lim.)  
Dee Oil Co. (Limited) (Jelly)  
Grindley and Co.

**PEPPERMINT OIL**

Cocking and Co.

**PEROX. OF HYDR**

Dunn and Co.  
Robbins and Co.

**PHOTOGRAPHIC**

American Camera Co.  
Barnard and Grey  
Howards and Son (Chemicals)  
Marion and Co.  
Orms, J., and Co.  
Perken, Son and Rayment  
White, Alfred, and Sons

**PHARM. PREPS.**

Allen and Hanbury  
Baelz, R., and Co.  
Barron, Squire and Co.  
Billant  
Brady and Martin  
Burgoyne, Burdighes & Co.  
Burroughs, Wellcome & Co.  
Chantand, G.  
Chassaigne and Co.  
Claudon, G.  
Dee Oil Co. (Limited)  
Duncan, Flockhart and Co.  
Fellows  
Farris and Co.  
Fletcher (Lqrs. for Syrups)  
Fruneau, E.  
Giles Schacht & Co.  
Gress, R. W., and Co.  
Hearson, Squire and Francis  
Hewlett and Son  
Hill, A. S., and Son  
Hopper, B., and Co.  
Howards and Sons  
Keith & Co. (Conc. Tinctures)  
Lorenz, H.  
May and Baker (Phenacetine)  
Rankin and Borland  
Riccle and Co.  
Roberts and Co.  
Soden Mineral Produce Co. Ld.  
Symms and Co.  
Tucker, J., and Co.  
White, Alfred, and Sons  
Willows, Francis and Butler  
Woolley, Sons and Co.  
Wyllys and Co.

**PINE PRODUCTS**

Burroughs, Wellcome and Co.  
Stern, G. and G.

**PILL MACHINES**

Pindar, J. W.  
Toogood, W. (Coater)



**PILLS (Coated, &c.)**

Allen and Hanbury  
Anderson Apothecaries Hall  
Beeson, Thomas  
Eade's Gout Pills  
Evans, Sons and Co.  
Frere, L.  
Holloways  
McKesson and Robbins  
Newbery and Sons  
Richards, J. M.  
Towler, E. T.  
Warner, W. R. & Co. (Coated)  
Wyleys and Co.

**PLASTERS**

Cooper and Co.  
Evans, Sons and Co.  
Johnson and Johnson  
Mather, W.  
Quilliam, J., and Co.  
St. Dalmas, A. De  
Seabury and Johnson  
Thomson, M. F.  
Younk, H.

**PODOPHYLLIN, &c.**

Keith, B., and Co.  
Smith, T. and H., and Co.

**POLISHING**

Bradley & Bourdas (Albatur)  
Fordham, W. B., and Sons  
(Limited)  
Oskey, John, and Sons  
Griffiths, T. M.

**PORCELAIN GOODS**

Toogood, (E.o. Pots, regist.)

**PRINTING**

Bowers Bros.  
Cyclostyle Co.  
Ford, Shapland and Co.  
Silverlock, H.  
Townsend, J.  
Zuccato and Woolf.

**PUMILINE**

Stern, G. and G.

**QUININE SALTS**

Andreas, Oscar, and Co.  
Boehringer, O. F., and Sohne  
Howards and Sons  
Kuhn, B.  
Rivers, Hicks (Penny Quinine)  
Zimmermann and Co.

**RENNET**

Duncan, Flockhart and Co.  
Johnson and Jorgensen  
Oldfield, Pattinson and Co.

**RESPIRATORS**

Schntze, F., and Co.

**SACCHARIN**

Allen and Hanbury  
Burroughs, Welloome and Co.

**SALICIN**

Macfarlan and Co.  
Smith, T. and H., and Co.

**SALICYLIC ACID**

Fuerst Bros. (Kolbe's)

**SALOL**

Kuhn, B.

**SEALING WAX**

Stewart, G., and Co.

**SELTZOGENES**

Brath and Hinchliffe, (Ld.)

Dunfort

Evans, Sons and Co.

Fovro, T.

Gerant, E., and Co.

Idris and Co.

May, Roberts and Co.

**SAUCES, PICKLES**

Goodall, Backhouse and Co.

Tyrer, P.

**SCHOOLS, &c.**

Central School of Chemistry

and Pharmacy

City School of Chemistry and

Pharmacy (Lim.)

Liverpool School of Pharmacy

London Homoeopathic and

Medical School

Manchester College

South London School of

Pharmacy, Lim.

The School of Pharmacy

Westminster College

**SOAP**

Blondeau and Co. (Vinolia)

Chiswick soap Co.

Cook, E., and Co.

Fordham, W. B., and Sons

(Lim.)

Pears' Soap

Stern, G. and G.

**SHOP FITTERS**

Bowling and Govier

Rygrave, J. and W.

Evans, Sons and Co.

Hawke and Son

Howlett, S.

Natali, E. (Show Cases)

Poths, H., and Co.

Treble, G., and Co.

Treble, G., and Son

Yates, W. S.

**SPONGE**

Cresswell Bros.

Peterson, M., and Co.

**SPECTACLES**

Botwright and Grey

Darton, F., and Co.

Perken, Son and Rayment

**SPIRIT**

Burroughs (Pure and Methyl).

Evans, Sons & Co.

Harvey, J. and W., and Co.

Jones and Co. (Methyl.)

Macnair, A., and Co.

Macnair, J. and D., and Co.

Phillips and Co.

Smith, Stephen and Co.

**STAMPS (RUBBER)**

Hickisson, J.

Pollard, A. W.

**STOPPERS**

Austin and Co. (Sprinklers)

Barnett and Foster

Sanders, H. G., and Son

**STOVES**

Clark, S. and Co.

**SURGICAL**

Ayrton and Saunders

Bailey, W. H., and Son

Barclay and Sons (Limited)

Cocking, J. T.

De Luca, G. V.

Eschmann Bros. and Walsh

Haywood, J. H.

Ingram and Son

Liverpool Patent Lint Co.

Maw, Son and Thompson

Mostliver and Co.

Robinson and Sons

Schutze, F., and Co.

Schoenfeld Freres

Thompson, Walters, Hole and

Co. (Limited)

Wood, Vincent

**STARCH**

Critchley (Gloss)

**SUGAR**

Gibson, R., and Sons

**SULFONAL**

Burroughs, Wellooms and Co.

May and Baker

**SYPHONS**

Barnett and Foster

Brath and Hinchliffe (Ld.)

Dunfort

Favarger and Co.

Fevre, T.

Gerant, E., and Co.

Kilner Bros.

Prudon and Dubost

**SYRINGES**

De Luca, G. V.

Schoenfeld Freres

**SYRUPS**

Fletcher, Fletcher (Liquors)

Idris and Co.

**TILL**

Stokes, G. R. & Co.

**TEA**

French and Langdale  
Gt. Tower St. Tea Co.  
Santha Tea  
Walker and Dalrymple

**TOBACCO,****CIGARETTES**

Bewlay and Co.  
Pencecock, M. & L.  
Taddy and Co.

**THERMOMETERS**

Bailey, W. H., and Son  
Berry, F. H.  
Darton, F., and Co.  
Perken Son and Rayment

**TOILET**

Evans, Sons and Co.  
Fordham, W. B., and Sons

(Lim.)

Hopgood and Co.

Mumford, G. S.

Quelch, H. C.

Simon, J.

Trueditt, H. P. (Limited)

**TOOTH PASTE**

Jewsbury and Brown  
Sutton, O., and Co. (Block)

Wilson, A. (Hunter's)

Woods, M. (Arecas)

**TRADE MARKS**

Dnkes, B.  
Horn and Son

**TRUSSES**

Ayrton and Saunders  
Bailey, W. H., and Son

Haywood, J. H.

Wood, V.

**TYPE-WRITING**

Pollard, A. W.

**URETHANE**

Howards and Sons

**VACCINATION**

Vaccine Association (Lymph)

**VALUERS AND****TRANSF. AGENTS**

Berdoe & Co.  
Brett, F. J.  
Crocker, G. B.  
Orridge and Co.

**VERMIN KILLER**

Battle, J. R.  
Sanford and Son  
Steiner and Co.

**VASELINE**

Chesebrough Manufacturing Co.

**VETERINARY**

Riggs, T.  
Bragg, P., and Co.  
Day and Sons  
Day, Son and Hewitt  
Elliman, Sons and Co.  
James, W. H. (Rivier)  
Mere de Chantilly, P.  
Rookledge, J.  
Spratts (Dogs)  
Sutton, F., and Co.  
Walker, Troke and Co.  
Wyleys and Co.

**VINOLIA**

(Superfatted Medical and Toilet)

Blondeau and Co.

**WHOLESALE AND****EXPORT DRUGS**

Allen and Hanbury

Barron, Harveys and Co.

Brothers, J. and Co.

Burgoyne, Burdidge and Co.

Bush, W., Son and Co.

Clay, Dod and Co.

Coward, C. F., and Co.

Davy, Humphrey, and Co.

Evans, Sons and Co.

Evans, Leacher and Webb

Evans and Sons (Limited)

Faulding, F. H., and Co.

Ferris and Co.

Fox, W., and Sons

Goodall, Backhouse and Co.

Harker, Stagg and Morgan

Heaton, Squire and Francis

Hewlett and Son

Hill, A. S., and Son

Hodgkinson, Treacher and

Clarke

Lofthouse and Saltmer

Macfarlan, J. F., and Co.

Oldfield, Pattinson and Co.

Potter & Clarke (American)

Sumner, R., and Co.

Symes and Co.

Thompson and Capper

Thompson, Walters, Backhouse

Co. (Limited)

Walker, Troke and Co.

Willows, Francis, and Entier

Woolley, Jas., Sons and Co.

Wright, Layman and Umney

Wyleys and Co.

**WINES, SPIRITS**

Coleman and Co. (Wholesale)

Durrant, G. (Orange) Man.

Goodall, Backhouse and Co.

Idris and Co.

Miller, A., and Co.

Robinson, B.

# BERDOE'S TRIPLE FRENCH PERFUMES



THESE PERFUMES have been known to the trade for many years past, and their steadily increasing sale is the best proof of the appreciation in which they are held. Notwithstanding that the prices of some brands of perfumes have been reduced, F. NEWBERRY & SONS find it both impossible and needless to offer any other advantages to buyers than—(1) the excellent quality of the Perfumes themselves, (2) their price. The object kept in view is not to produce goods which may be sold at a given price and leave a given margin of profit, but to produce such as shall equal or surpass a given standard of quality.

**BERDOE'S TRIPLE**

PLAIN STOCK BOTTLES of 20 oz., 10 oz., and 5 oz.		£ s. d.
Ess. Bouquet	per 20 oz.,	0 8 7
Frangipane	per 10 oz.,	0 4 4
Jasmin	per 5 oz.,	0 2 3
Jockey Club		
Millefleurs		
New Mown Hay		
Opoponax		
Patchouli		
Rondeletia		
Stephanotis		
Ylang Ylang		

**FRENCH ESSENCES.**

		£ s. d.
Violets	per 20 oz.,	0 11 3
Wood Violet		
White Rose, 20 oz., 9s. 10d.; 10 oz., 5s. 1d.; 5 oz., 2s. 7d.		
Eau de Cologne	per 20 oz.,	0 4 4
Lavender Water	" 10 "	0 2 3
	" 5 "	0 1 2

The above are the leading Essences, and to these the special attention of customers is asked. Those who desire greater variety will find in "Newbery's Catalogue" a more extended list.

Berdoe's Perfumes, in Handsome Show Bottles for the Counter, Rose Cut Stoppers, Vitrified Opal Shield Labels with Gold Border and Black Letters, from 11s. 6d. each.

## F NEWBERRY & SONS,

Established A.D. 1746.

1 & 3 KING EDWARD STREET, LONDON, E.C.



PARIS EXHIBITION, 1889.  
PRIZE MEDAL AWARDED TO



# "SALVO PETROLIA"

(VASELINE).

Absolutely Genuine Paraffinum Molle of the very Purest Form, and we claim that it is superior to Vaseline.

Packed in Tins, 1, 4, 10, 14, 28, 56, and 112 lbs.

# "OLEUM DEELINÆ"

(REGISTERED).

Universally adopted by the Medical Profession for

**ECZEMA,**  
**OPHTHALMIA, SCURVY, RINGWORM,**  
**ITCH, PILES, SKIN DISEASES,**

FOR

**EXTERNAL & INTERNAL IRRITATION**  
OF EVERY KIND.

PACKED IN CASES—

One Doz. 1s. 6d. Bottles; One Doz. 2s. 6d. Bottles  
or half of each.

TESTIMONIALS MAY BE HAD UPON APPLICATION.

# "EDIBLE SALVO PETROLIA"

For Public Speakers, Actors, & Singers.  
1s. per Tube.

The above are Manufactured Solely by the Proprietors,

**THE DEE OIL COMPANY,**  
**LIMITED.**

Works—SALTNEY, CHESTER.

OFFICES:

**LONDON — 38 LEADENHALL ST., E.C.**

Liverpool, Dublin, Manchester, Glasgow, Hull, Cardiff,  
Bristol, Belfast, Barrow-in-Furness, Nottingham,  
Paris, Hamburg, &c.

## BAILEY'S PATENT BRUSHES

The Latest Novelty is our  
RUBBER  
Complexion Brush.

Price 3s. 6d. each.

PACKED IN A NEAT BOX.  
Entirely does away with  
poisonous cosmetics and  
face washers. Used in the  
ordinary daily ablutions,  
with a little soap, it makes  
the skin beautifully fresh,  
soft, and smooth, and effectually  
eradicates all pimples,  
blotches, pimples, &c. Used  
as a shampoo brush, gentlemen  
will find it a most useful  
adjunct to the toilet, as  
it entirely removes scurf  
and dandruff. Mothers and  
nurses will find it invaluable  
for bathing the delicate skin  
of infants and children.

Prices—Bath Brushes,  
5s.; Toilet Brushes, with  
Handles, 1s. & 2s. each;  
Tooth Brushes, 10d. & 1s.

Bailey's New  
Rubber Teething  
Ring.

Is perfectly tasteless, and so  
constructed that the flat-  
ended teeth serve to expand  
the skin of the gums, softening  
the latter, and aiding  
the coming tooth without  
irritation. Price 5d.

Of all Chemists & Dealers in  
Toilet Goods or direct from  
the Manufacturers,

DAVID MOSELEY & SONS,  
14 Aldermanbury Avenue,  
London, E.C.;  
Manchester; Glasgow;  
Brussels and Paris.

## "Cream of Magnolia."

MATCHLESS FOR THE COMPLEXION.

A Marvellous and Unique Preparation for Softening, Toning, and  
Beautifying the Skin.  
INVALUABLE for removing Spots, Sunburns, Blotches,  
and all Imperfections.

IMPARTS A VELVETY SOFTNESS AND BLOOM.

Renders it Beautiful to the Eye, and deliciously soft to the Touch. Can  
be used with the most perfect safety to any child or infant.  
In Bottles, post free, 2s. 6d., 4s., 7s., and 10s. 6d., or Sample Bottles, post  
free, 1s. 3d., direct from the Proprietor,

**JOHN STEEDMAN,**

154 QUEEN'S ROAD, BAYSWATER, LONDON W.

And of all Chemists throughout the World.

ESTABLISHED 1836.

Ladies once using this Preparation will never be without it.

The Original

Arnicated

Corn and

Bunion

Plasters.



Please  
see that  
YOUNG'S  
goods are  
supplied, as there  
are many worthless  
imitations.

ESTABLISHED  
A.D.  
1846.

**HENRY YOUNG, Manufacturer, LONDON.**



# "ACME BRAND" MENTHOL CONES.

Book your wants for "Cones." Menthol keeps advancing; but at present  
**OUR PRICES ARE UNCHANGED.**

With Orders of £1 5s. we will supply a Pretty China Group, with Sign-post bearing lettering (this makes a striking Advertisement in any Window); or a Japanese figure 18 inches high, with board with inscription, Japan being the "home" of Menthol. This makes an appropriate and telling show figure.

No. 88.	Hard Wood Boxes, Pedestal Shape .....	1/9 per doz.	No. 206.	Boxwood Boxes, as No. 203, large size .....	3/3 per doz.
" 89.	Nickel Screw Capped Bottles, 80 grn. Cones .....	3/3 "	" 207.	" " Draughtsman Shape .....	3/6 "
" 90.	" " " " 60 " .....	2/9 "	" 207B.	" " " small size ..	2/3 "
" 92.	" " " " 30 " .....	1/11 "	" 208.	Vegetable Ivory, " " .....	4/9 "
" 161.	Boxwood Boxes, Acorn Shape .....	3/2 "	" 210.	Boxwood Boxes, Acorns, Nickel-plated Caps .....	3/6 "
" 162.	" " Pedestal Shape, Screw Lids .....	3/- "	" 211.	Vegetable Ivory Boxes, Nickel-plated Caps .....	4/- "
" 163.	Vegetable Ivory, Acorn Shape .....	4/- "	" 212.	Boxwood Boxes, Bullet Shape, reversible end .....	3/5 "
" 200.	Boxwood Boxes, Pedestal Shape .....	2/2 "	" 213.	Menthol Charms for Watch Chain, &c. ....	2/1 "
" 201.	" " Barrel Shape, Screw Lids .....	3/- "	" 214.	Glass Show Bottle, with Cone on Stopper .....	3/10 "
" 201B.	" " " extra large Cone ..	4/3 "	" 214G.	" " " extra large Cone .....	5/1 "
" 202.	" " Bullet " .....	3/- "	" 216.	Boxwood Boxes, Beer Bottle Shape, large Cone ..	4/- "
" 203.	" " Cone " .....	3/- "	" 217.	Glass Show Bottle, with Cone on Stopper .....	2/9 "
" 204.	Vegetable Ivory, Castle " .....	4/3 "	" 218.	Menthol and Court Plaster, in Nickel Cases .....	3/9 "
" 205.	Boxwood Boxes, Cone Shape, each in box .....	2/6 "			

## NEW PATTERNS, SPECIALLY SALEABLE.

No. 217F.	Glass Show Bottle, with foot, as fig. 88 .....	1/8 per doz.
" 217A.	" " " as fig. 161 .....	3/- "
" 214A.	" " " as fig. 161. This has a very large Cone .....	4/3 "
" 220.	Cone Shape, as fig. 203, each in slide box, 1 dozen in Outer, extra size .....	4/3 "
" 221.	Large Flat Draughtsman, very large Cone (120 grains) .....	4/9 "
" 222.	Elegantly-cut Show Glass Bottles, 3 cuttings .....	9/- "
" 224.	Enamelled Tin Box, with Printing on box, 30-grain Cone .....	1/6 "

*All Patterns marked \* may be had 2d. dozen less in Plain Card Boxes, instead of our Registered Hanging Glass Show Case.*

*All Patterns marked \* may be had Carded where possible, at same reduction as for Plain Boxes.*

To meet the requirements of those who require

## CHEAP MENTHOL CONES

we have decided to offer them at lower prices than hitherto.

We guarantee them all pure Menthol, of best quality.

No. 207s.	Draughtsman Shape, Polished Willow Boxes, usual 1s. size .....	20/- per gross.
" 202s.	Bullet " " " " 9d. " .....	13/6 "
" 206s.	Cone " " " " 9d. " .....	13/6 "
" 201.	Barrel " " " " .....	13/6 "
" 219.	Bottle " " " " 1d. size .....	8/- "



163.



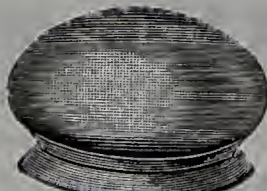
201, 201B, 201s.



88, 162.



202, 202s.



207, 207B, 207s.



220, 203, 205, 206, 206s.

These Prices are for not less than Half a Gross, one Pattern or Assorted. All Boxes are best finished, and with label branded on box, except Nos. 216, 221, and 220, and the Glass Show Bottles and Cheap Series.

**SPECIAL PRICES FOR QUANTITIES AND LOOSE CONES.**

Branded Boxes may be had with Buyer's own name if desired. Particulars on application.

# HOCKIN, WILSON & CO.

13 to 16 New Inn Yard, 186a Tottenham Court Road, LONDON, W.

AND MANCHESTER.



89, 90, 92.



214, 214G, 217.



161, 210, 211.



# A. S. LLOYD'S EUXESIS,

For Shaving without Soap, Brush, or Water.

## CAUTION.

The only Genuine has a yellow label printed ONLY in Black Ink, and bears the original address of the late inventor, "27 Glasshouse Street, Regent Street," the proprietors having purchased, under an administration suit, the Secret, Trade Mark, Goodwill, and Premises:

SOLE PROPRIETORS

## R. HOVENDEN & SONS, LONDON.



### CRÈME SIMON À LA GLYCERINE.

MARVELLOUS FOR

Softening & Whitening the Complexion. Most efficacious for the Skin.

J. SIMON, 36 RUE DE PROVENCE, PARIS.

FOR SALE BY DRUGGISTS AND FANCY GOODS STORES.

SUPERIOR

TO

VASELINE

AND

CUCUMBERS

## FACTS SPEAK FOR THEMSELVES!

Results of a voting recently held in the pages of the *British and Colonial Druggist*, as to the most popular makers of the various articles sold by Chemists, reveal the following indisputable facts under the heading of **Menthol Cones**:—

Votes for—

Hockin, Wilson & Co.	65
Christy & Co.	63
Maw	28
Castle Brand	5

161

Votes for—

Shirley's

A1 Brand 644

So that out of 805 votes, **SHIRLEY'S BRAND** obtained 80 per cent., whereas all other brands put together obtained but 20 per cent., or comparing each brand separately,

**SHIRLEY'S** obtained—

Nearly 10 times as many votes as	Hockin, Wilson & Co.'s.
Over 10	Christy & Co.'s.
" 23	Maw's.
" 128	Castle Brand.

## THE REASON IS SIMPLE.

Every endeavour has always been made to assist the retailer in selling

## SHIRLEY'S A1 BRAND MENTHOL CONES,

By giving away Show Cases, Dummy Cones, Handbills, &c., the latest in this way being "THE LITTLE CRIER."



This Elegant Biscuit-China Figure, an Ornament to any Shop,

### GIVEN AWAY

To Purchasers of 25/- worth of

**SHIRLEY'S A1 BRAND MENTHOL,**

Or two if 40/- Order is Placed.

The following special parcels have been arranged to suit all classes of trade:—

Parcel 1, 25/. 4 doz. 2d., 1 doz. 3d., 2 doz. 3½d., 3 doz. 4d., 2 doz. 6d.

Parcel 2, 25/. 4 doz. 6d., 2 doz. 4d., 1 doz. 1s.

Parcel 3, 25/. 3 doz. 3d., 3 doz. 1s., 1 doz. 4d.

Parcel 4, 25/. 1 doz. 9d., 2½ doz. 1s., ½ doz. 1s. 6d.

By calculating what each of the parcels would realise when sold, it will be found that they yield an average profit of 80 per cent. to the retailer on his outlay.

Parcel 5, 40/. 4 doz. 2d., 2 doz. 3d., 3 doz. 3½d., 5 doz. 4d., 4 doz. 6d.

Parcel 6, 40/. 5 doz. 8d., 3 doz. 4d., 2½ doz. 1s.

Parcel 7, 40/. 4 doz. 6d., 4 doz. 4d., 1 doz. 9d., 2 doz. 1s.

Parcel 8, 40/. 4 doz. 1s., 2 doz. 9d., ½ doz. 1s. 6d.

1d., 2d. and 3d. **MENTHOL CONES** for those who are obliged to sell cheap shapes.

No. 110v. 1d. Vase shape, 3 doz. on a card. 7/6 gross.

No. 114. 2d. Varnished Pedestal shape, 3 doz. on card. 16/ gross.

No. 115. 3d. Varnished Draughtsman, 2 doz. on card. 20/ gross.

### A1 COCAINE MENTHOL TOOTHACHE TUBE.

Sells splendidly; 12 on a card, 3/6 dozen.

### SHIRLEY'S

### 20/ CASE OF SMELLING BOTTLES.

Order one of these cases and you will not regret it. The case is lined with maroon velvet, and has a mirror back. The goods can be got at from the counter, as the case opens from the back. You can rely on a good assortment of bottles being sent you.

ARTHUR W. SHIRLEY, 55 FARRINGDON ROAD, LONDON, E.C.



# A. S. LLOYD'S EUXESIS, FOR SHAVING WITHOUT SOAP, WATER, OR BRUSH.

## CAUTION.

The labels on genuine EUXESIS bear signature of Inventor, A. S. LLOYD, in *BLACK INK*, and the signature of his Widow, AIMEE LLOYD, in *RED INK*. Refuse all others.

Manufacturer: **AIMEE LLOYD** (WIDOW OF A. S. LLOYD, formerly of 27 GLASSHOUSE STREET)

3 SPUR STREET, LEICESTER SQUARE, LONDON

N.B.—When ordering from Wholesale Houses, write "LLOYD'S EUXESIS (WIDOW'S)."

## WHITE AND SOUND TEETH.

**JEWSBURY & BROWN'S**

# ORIENTAL TOOTH PASTE.



This old-established and increasingly favourite Dentifrice has been over Sixty Years before the Public. It is warranted to retain its properties and keep in good condition in any climate. The original and only genuine is manufactured solely by

**JEWSBURY & BROWN, Chemists, MANCHESTER,**

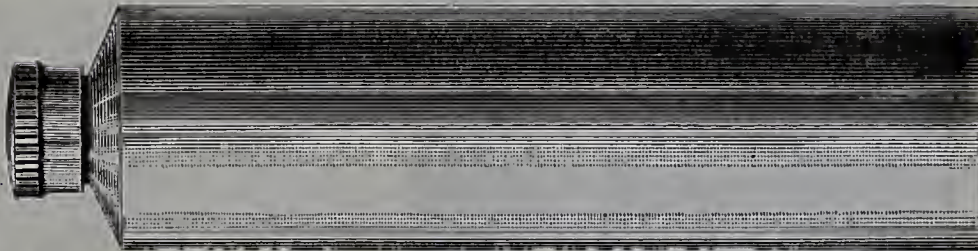
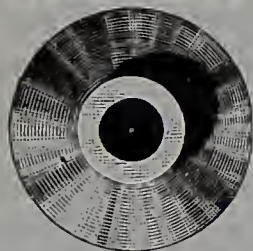
and is distinguishable by the Trade Mark, printed in red and green, a facsimile of which is annexed. Particular attention should be paid to this guarantee of genuineness, as numerous imitations are offered. Sold universally by Chemists and Perfumers, at 1s. 6d. and 2s. 6d.

The Trade and Shippers supplied by the leading houses in London and elsewhere. Bills and Show Cards forwarded on receipt of address cards and directions for enclosure.

# METALLIC COLLAPSIBLE TUBES FOR PAINTS,

Perfumes, Shaving Creams, Soaps, Oils, and all Fluid or Semi-Fluid Substances.

FOR CREAMS SOAPS.



**H. G. SANDERS & SON, Manufacturers,**

Victoria Works, Victoria Gardens, Notting Hill Gate, LONDON, W.

TELEGRAPHIC ADDRESS: "COLLAPSIBLE LONDON."

[3]

ESTABLISHED 1820.

# PUREST

BRAND—

"S. SERAPHIMOFF,"

# OTTO

Distiller & Exporter,

KEZANLIK, BULGARIA.

SOLE

CONSIGNEES—

# OF

# FUERST BROS.

4 COPTHALL BUILDINGS, LONDON, E.C.

# ROSE.

Telegrams—"Fuerst London."

Telephone No. 462.

[4]

"Second to none." All buyers desiring absolute purity and guaranteed excellence should write for Samples and Prices.



# To our Export Trade.

## ST JACOBS OIL



## CONQUERS PAIN

To facilitate our numerous friends abroad, and their English Representatives, in shipping ST. JACOBS OIL to foreign parts, we have arranged to carry large stocks of the OIL in Bond, both in London and Liverpool. These goods are packed six dozen to the case, weight forty pounds. We ship in original cases only. All foreign buyers should send to us for our special Price List, and make their Orders to their English houses or to us direct for not less than six dozen, as the price of ST. JACOBS OIL in Bond is considerably less than it can be sold on Order filled from Stock.

Orders for the Continent will be filled f.o.b. in Paris from our Paris House, 72 AVENUE KLEBER. We are always prepared to send forward for enclosure to any English house, or carriage paid to destination, when the Order for ST. JACOBS OIL is sent direct to us, a liberal supply of our original, attractive, and useful advertising matter, consisting, in part, of thirty-two different styles and

designs of Counter Wrappers, printed on one side only, with wide margins, on clear, white, strong paper.

Cable and Telegraphic Day Address—"RUMATIX LONDON." Day Telephone—No. 6714.

Cable and Telegraphic Night Address—"EDUCIBLE LONDON." Night Telephone—No. 2794.

**THE CHARLES A. VOGELER CO., 45 Farringdon Road, LONDON, E.C.**



# AFTER THE INFLUENZA.

LONDON.]

FEBRUARY 15

[1890.

In numerous cases the Influenza has left a lasting complication, chiefly affecting the respiratory apparatus. Nasal catarrh of a chronic nature, ozæna, bronchial catarrh and pseudo-pneumonia have appeared most predominant amongst the list of sequelæ. It is the desire of every physician to exhibit his medicaments in the most eligible and convenient forms, and we take the liberty, therefore, of bringing to the notice of the profession some improvements upon the ordinary pharmaceutical products of the market. Probably no remedy is so extensively employed in bronchial affections as AMMONIUM CHLORIDE. The Tabloids of the compressed drug are frequently found useful as a resolvent, and in intractable cough the Tabloids quickly alleviate the irritation. A Tabloid may be allowed to slowly dissolve at the back of the tongue, when it will act as a continuous gargle. A Tabloid of BORAX, CHLORATE OF POTASH, CHLORATE OF POTASH AND BORAX, or a VOICE TABLOID may be employed in the same manner.

THE VEREKER IMPROVED AMMONIUM CHLORIDE INHALER affords perfectly neutral fumes of Ammonium Chloride Vapour. In catarrhal affections of the nares and throat especially, the neutral vapour inhaled has proved very efficacious. Drs. Kendal Franks and W. Murrell highly recommend it as a means of relieving congested conditions of the naso-pharyngeal mucous membrane, or to remove obstruction of the Eustachian tubes, another sequel to influenza. An important point to be observed in using this Inhaler is that the neutral vapour of ammonium chloride may be supplemented by the addition of a "Vaporole" of Pinol, Terebene, Eucalyptia or any volatile inhalant crushed and dropped into the wash bottle; when this is done, the vapour of ammonium chloride passing through the water in the wash bottle displaces a quantity of the volatile oil, which is conveyed to the remotest parts of the lungs.

## CONVALESCENCE.

This is the time when every medical attendant is anxious to bring his patients' strength up to the normal condition. BEEF AND IRON WINE (BURROUGHS) is an excellent roborant and tonic; each fluid ounce of the wine contains 4 grains of Iron Citrate, and the stimulating equivalent to 1 ounce of fresh beef, with a small quantity of quinine. The preparation is palatable, is readily taken by children, and much liked by fastidious patients.

TONIC COMPOUND TABLOIDS (Iron Hypophosphate, 2 gr.; Quinine, 1 gr.; and Strychnia, 1/100 gr.) are very suitable for prescribing a tonic in a portable form; an elegant vinaigrette bottle, containing 25 Tabloids, may be conveniently carried in the waistcoat pocket.

THE KEPLER MALT EXTRACT, PEPSIN (PURE) TABLOIDS, PEPTONIC TABLETS, ZYMINE TABLOIDS or ZYMINE COMP. TABLOIDS are highly recommended by the profession as efficient aids to digestion in debilitated or atonic conditions of the stomach.

THE KEPLER SOLUTION OF COD-LIVER OIL IN MALT EXTRACT is another excellent adjunct to the ordinary medicines, and "is an ideal form for the administration of fat." When this solution is prescribed it is well borne by invalids and children, as the diastase of the malt stimulates and assists pancreatic digestion and promotes the assimilation of the cod-liver oil.

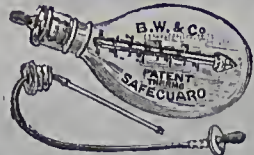
**BURROUGHS, WELLCOME & Co.,** Snow Hill Buildings, LONDON, E.C.

*Will be happy to supply Price Lists to Chemists free on request.*



# THE THERMO-SAFEGUARD FEEDING BOTTLE (B. W. & CO.)

As a Practical and Scientific Invention for protecting the lives of infants, nothing, except Fairchild's discovery of the pure Zymine Peptonising agents, has of late years approached in importance the Thermo-Safeguard Feeding Bottle.



The Thermo-Safeguard Feeding Bottle has a thermometer imbedded in the glass in such a manner as to correctly and distinctly indicate the temperature of the contents. It has the further advantage (since the bottle is marked in ounces) of giving a register of the exact amount of food taken at each feeding, thus tending to avert the evil of over-feeding. It is specially adapted for use in connection with the Zymine Peptonising Powders (Fairchild).

"The Bottle has a great deal to recommend it."—*British Medical Journal*.

"The best of all Feeding Bottles, and ought to be universally used."—*Edinburgh Medical Journal*.

No. 1 ... 9/- per doz.

No. 2 ... 12/- per doz.

No. 3 ... 22/- per doz.

Above prices subject to usual discount.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.

See Recommendatory Notice of Medical Press and Opinions of the leading Dermatologists.

## WRIGHT'S

Extract from the Proceedings of the Royal Society of Edinburgh:—"Experiments on the Chief Disinfectants of Commerce, with a view of ascertaining their power of destroying the spores of the 'Anthrax Bacillus,' by a Medical Officer of Health and Public Analyst. A 10 per cent. solution of Liquor Carbonis Detergens, acting for four hours, distinctly retarded growth of Anthrax, for the spores, whether in gelatin-pork or in the broth, did not commence developing for 24 hours. Undiluted Liquor 'Carbonis Detergens,' acting for four hours, arrested future growth."

Of all Druggists, Wholesale and Retail, throughout Great Britain, Ireland, and Colonies.

## LIQUOR

From the *Lancet*, Dec. 22, 1886:—"In our hands it has been a most effective agent in skin diseases, especially of the chronic eczematous class, and one class of psoriasis which had resisted all other kinds of treatment speedily got well under the application of the *Liquor Carbonis Detergens*. We esteem it a very valuable addition to our list of skin remedies."

871:—"We have tested it, and can affirm its value as a detergent agent. We consider the Liquor is an article of great utility."

## CARBONIS

The *Practitioner* of September, 1881:—"Eczema connected with varicose veins of the leg—also Pruritus Scroti, Labiorum, and Ani—is best relieved by weak tarry lotions, one of the best of which is *Wright's Liquor Carbonis Detergens*."

P. McLEOD, Colonel R.A., Inspector-General of Ordnance, Ordnance Office Madras, writes Sept. 10, 1887:—"I can certify that 'Liquor Carbonis Detergens,' has cured me of a Psoriasis of 21 years, incurred in Burmah, after every effort of such an able skin doctor as Sir Erasmus Wilson had failed."

From the *Medical Times and Gazette* Jan. 19, 1867:—"We have more than once called attention to the value of this remedy in chronic eczema."

From the *British Medical Journal*, Sept. 22

Kept in stock and sold by all Druggists (Wholesale and Retail) throughout the United Kingdom and Colonies. PROPRIETORS—

W. V. WRIGHT & CO., 48 Southwark Street, LONDON.

## DETERGENS.



## THE GREAT VEGETABLE BLOOD PURIFIER

IS A REMEDY DISCOVERED BY INTUITION, AND FOUNDED BY EXPERIENCE, TO BE INVALUABLE. OBTAINED, MANY YEARS SINCE, FROM THE GREEK INDIANS—ONE OF THE SAVAGE TRIBES OF NORTH AMERICA—ITS MERITS HAVE BECOME KNOWN AND APPRECIATED THROUGHOUT THE CIVILIZED WORLD. ITS SUCCESS IN THE TREATMENT OF ALL DISEASES THAT RESULT FROM BLOOD TAIN OR BLOOD POISON HAS BEEN UNPRECEDENTED, THOUSANDS WHO HAVE BEEN GIVEN UP AS HOPELESSLY DISEASED, HAVING BEEN HEALED AND MADE HAPPY BY ITS HEALTH-GIVING PROPERTIES. IT Cures Scrofula, Eczema, Rheumatism, Old Sores, Cancer, Catarrh, Contagious Blood Poison, &c.

AND CONTAINS NO MERCURY, IODIDE OF POTASH, ARSENIC, NOR ANY OTHER POISONOUS DRUG.

Books on Contagious Blood Poison, and on Blood and Skin Diseases, posted free.

SPECIFIC COMPANY

35 SNOW HILL LONDON. E.C.

# MARION'S PHOTO SUPPLY WAREHOUSE.

MARION'S Britannia Plates.  
MARION'S Instantaneous Plates.  
MARION'S Chloride Transparency Plates.  
MARION'S Bromide Opal Plates.  
MARION'S Portrait Chloride Opals.  
MARION'S French Mounts for Photographs.  
MARION'S Albuminised and Ready Sensitised Papers.  
MARION'S Bromide and Carbon Papers.  
MARION'S Cameras and Lenses.

Agents for Voigtlander's Celebrated Lenses.

## KRUGENER'S PATENT BOOK CAMERA.

Takes 24 photos; can be carried in the pocket. Reduced Price 45s.

## McKELLEN'S PATENT DETECTIVE CAMERA.

For plates 4 1/2 x 3 1/4. The only Camera in which the exact image can be seen on the screen at the moment of exposure. Price £9 9s.

## MARION'S PHOTO OUTFITS.

From 21s. to £50.

EVERY REQUISITE FOR PHOTOGRAPHY.

22 & 23 SOHO SQUARE, LONDON, W.





ESTABLISHED 1859.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES:

MELBOURNE, SYDNEY, AND NEW YORK.

*Published every Saturday.*

Subscription 10s. per year, payable in advance; dating from the commencement of any month.

Supplied only to persons connected with the Trade.

Post free to every country in the world. Single copies 4d. each.

Cheques or Postal Orders should be payable to EDWARD HALSE, and crossed MARTIN & Co.

Supplied regularly to every member of the following Societies, who have adopted THE CHEMIST AND DRUGGIST as their official organ:—

The Pharmaceutical Association of New Zealand.

The Pharmaceutical Society of Queensland.

The Pharmaceutical Society of South Australia.

The Hobart Chemists' Association.

The Launceston Pharmaceutical Association.

South African Pharmaceutical Association.

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

## Literary Contents.

	PAGE		PAGE
Bankruptcy Reports .....	218	Gazette .....	219
Commentary .....	224	General and Provincial News..	211
Correspondence:—		German Pharmaceutical News	227
The New Pharmacy Bill; Re-		Legal Reports .....	217
form of the Pharmaceu-		Metropolitan Reports .....	208
tical Society .....	237	Obituary .....	211
Mr. Wellcome Explains; The		Personalities .....	219
Rent; Regulating Prices;		Pharmaceutical Society of	
Administration of Nitrous		Great Britain:	
Oxide Gas .....	238	Evening Meeting .....	212
Lin. Saponis Co.; That Ball		Pharmaceutical Society of Ire-	
of Quinine .....	239	land .....	214
Miscellaneous Inquiries ..	239	Pharmaceutical Story of	
Dr. Symes on Pharmaceutical		To-day .....	226
Affairs .....	215	Poisonous Proprietary Medicines	220
Editorial Notes:—		Professor Charteris on Salicylic	
The Illegal Practice of Medi-		Acid .....	225
cine .....	222	Provincial Reports .....	208
Mr. Howard on the Proposed		Railway Rates Inquiry .....	228
Railway Rates .....	223	Soluble Essence of Ginger ..	221
Mummified Cats .....	224	Trade Notes .....	219
French Pharmaceutical News..	227	Trade Report .....	233

## THE CHEMISTS' AND DRUGGISTS' DIARY, 1890.

We cannot supply any more extra copies of this work. The demand for it has been this year quite unprecedented.

## POST-CARD COMPETITIONS, 1890.

### THE PILL-MILL.

We ask competitors this month to estimate the actual average number of pills supplied to the public every day in the British Isles. They should base their calculations on facts within their range of knowledge. They can, for example, reckon from a week's trade how many of their own stock pills they sell daily, how many factory-made pills they have sold, how many they dispense, and about how many are contained in the patent medicines they supply. Finding thus their own daily average, they may roughly multiply this by 10,000 for the quantity sent out by chemists, and this total must be further very largely developed by adding what they think medical men, grocers, and others send out. We only want for competition the one total figure in numerals. This must be stated exactly, not in dozens or grosses or thousands. We shall add all these figures together, and

give the usual guinea prize to the competitor who gets nearest to the average.

Subscribers and their employes only are eligible to compete. No card will be admitted which reaches us after February 28, and no person may send in more than one card.

We shall be obliged to any competitor who will on his card, besides the figure, give us information or data which will assist us in forming a general estimate.

We may state, for the benefit of some clever jokers, that obviously absurd estimates will be excluded from the calculation.

WE give a lengthy report of an inquest held by Mr. A. Braxton Hicks on Thursday of this week, which seems likely to lead to legal proceedings to establish whether patent or proprietary medicines containing scheduled poisons must be labelled or otherwise dealt with as required by the 17th section of the Pharmacy Act.

OUR full report of Mr. David Howard's evidence before the Railway Rates Inquiry Commission should be read with interest by the many traders who have concerned themselves with this subject. Mr. Howard was subjected to a rather harassing cross-examination, but he succeeded in making prominent several decided grievances in the drug and chemical trades in regard to railway carriage. If these cannot be dealt with by the Commission, they will probably be remedied to some extent by the railway companies themselves.

SIR JOSEPH LISTER'S new antiseptic—the so-called double cyanide of mercury and zinc—was the subject of a lengthy paper at the evening meeting of the Pharmaceutical Society on Wednesday. Professor Dunstan has shown that this is not a chemical compound. Sir Joseph Lister took part in the discussion.

WE report also, as usual, the proceedings at the meeting of the Pharmaceutical Society of Paris held on Wednesday evening. Artificial musk was one of the subjects discussed there, the speaker's description and experiments agreeing with singular closeness to those we have published.

OUR correspondence, so far, does not indicate general satisfaction with the Pharmacy Bill proposed last week. The clause making it penal for any unqualified person to compound a medical prescription is likely to be the stumbling-block.

DR. SYMES, in his presidential address to the Liverpool Chemists' Association, discussed several subjects of pharmaceutical interest, and among the rest, it is curious to note, he indicated the probable advantages of enforcing the 17th section of the Pharmacy Act in regard to poisonous proprietary medicines in much the same way as the Surrey Coroner seems to advocate from a public point of view.

AN interesting item of information in the report of the Irish Pharmaceutical Council's meeting, which we publish, is the fact that they had ascertained by correspondence that their licence is accepted as sufficient evidence of qualification in the State of Georgia, U.S.

THE CHEMIST AND DRUGGIST OF AUSTRALASIA, published monthly at our Melbourne office, can be supplied to subscribers outside Australasia at 5s. per annum, payable in advance, and commencing at any date. Chemists interested in the drug trade and the pharmaceutical affairs of the Australasian Colonies will find a full record of all events affecting their occupation in *The Chemist and Druggist of Australasia*. Single copies can be supplied at 6d. each. Application should be made by English or American subscribers to the office at 42 Cannon Street, London.



## Metropolitan Reports.

**THE LIBERTY MUSICAL SOCIETY** (Burroughs, Wellcome & Co.) had a very successful smoking concert at the Salutation on Tuesday evening. Mr. Stanley Stevens was in the chair, and Mr. Burroughs was amongst those present. The programme was a good one, and included songs by the favourites and recitations by Messrs. C. J. Griffith and R. C. Sudlow, the latter's being "Jeremiah." The last concert of the season will be held on Tuesday, March 18.

**A DRUGGIST COMMITTED.**—In the Lord Mayor's Court on Monday, the case of *Hacker v. Lloyd* came before the Assistant Judge. The defendant, Mr. C. R. Lloyd, a wholesale druggist, of 3 Joiners' Hall Buildings, Upper Thames Street, was summoned to enforce payment of 10*l.* 2*s.* 10*d.*, for which judgment had been previously obtained. He was described as being in a large way of business, and an order was made against him for 5*l.*, to be paid in twenty-eight days, or committal for twenty days in default.

**STEALING A CHEMICAL MANUFACTURER'S COALS.**—William Cowen, aged 17, of Morning Lane, Hackney, was charged at Dalston Police Court on Monday, before Mr. Haden Corser, with being found on a barge on the River Lea with coals belonging to Mr. C. Kingsford, chemical manufacturer. Mr. Kingsford, jun., deposed that for some time his father had lost large quantities of coal from barges which came up to the works, as a consequence of which policemen were put to watch. The prisoner was arrested with a sack ready to take coals. Mr. Haden Corser sent prisoner to gaol for a month's hard labour.

**MRS. WELDON'S CHEMIST.**—In an interpleader action remitted from the superior court to the Clerkenwell County Court, and heard a few days since by his Honour Judge Eddis, Q.C., Madame Menier (the quondam friend and landlady of Mrs. Weldon), seeking to obtain the price of certain goods sold by order of the court, and which she alleged had been illegally removed from her house, a principal witness called on behalf of certain creditors of Mrs. Weldon, who preferred claims on the goods, was Thomas Titley, chemist, Charlotte Street, Fitzroy Square. He stated that in September last Mrs. Weldon owed him a considerable sum for drugs supplied. He went to 58 Gower Street and saw Mrs. Weldon about his debt, and looked over the house, when Madame Menier stated that all the goods belonged to Mrs. Weldon. On some occasions when he called he did not see Madame. A man named Clarke was there, and he packed up the goods which witness had agreed to purchase in satisfaction of his claim. The goods were sent to an auction room to be sold. They were not put into the sale under his own name, as he did not wish to appear in the matter. Clarke saw the goods sent to the auction room. His claim against Mrs. Weldon was 63*l.* 10*s.* Cross-examined: The house in Gower Street was a large one, and completely filled with furniture. He did not move any of the goods to his own house. Could not say where the other goods were taken to, as he did not know where Clarke lived, nor had he any communication with him. Clarke was the confidential servant of Mrs. Weldon. Before Mrs. Weldon left she requested him to take charge of some of her property, which consisted of old papers and things of that sort. He lent Mrs. Weldon 30*l.* to enable her to leave. It was not convenient to settle accounts before that date. He had known Mrs. Weldon for a considerable time, and supplied her with goods. He had perfect confidence in her. As he did not read the newspapers he was not aware that she had a great many actions in court which she had lost. The goods were sent to the auction rooms in the name of Woodward. Have you ever been in trouble?—What has that to do with this case? Must I answer the question, your Honour? His Honour: I think you may. Witness: Yes. Have you enjoyed Her Majesty's hospitality for a time?—I was sentenced to eighteen months' imprisonment for a misdemeanour, but it was a conspiracy. His Honour now said that there were a great many points in the case which would have to be decided in the superior court, as there were so many claimants for the money; but, when once it was decided as to the claims to be determined on, he gave liberty to either party to apply.

## Provincial Reports.

*Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.*

### BIRMINGHAM.

**MIDLAND COUNTIES CHEMISTS' ASSOCIATION.**—The next meeting of the members of the association takes place on Tuesday at the Mason College, when Mr. F. J. Liverseege, A.I.C., will read a paper entitled "Optical Illusions," which will be illustrated by numerous experiments.

**FAILURE OF A DISPENSER.**—An adjourned meeting took place on Tuesday afternoon, at the office of the Official Receiver for the city, of the creditors of Walter Robert Jones, a medical dispenser. The debtor had no assets, but he offered to pay to the Official Receiver 5*l.* a month out of his salary as dispenser to the Birmingham Guardians to provide a composition of 5*s.* in the pound. This was accepted.

**THE CHEMISTS' BALL.**—We regret that the name of Mr. C. Thompson (joint hon. sec. of the Midland Counties Chemists Association) was accidentally omitted from the list given of those present at the chemists' ball. Mr. Thompson worked with extraordinary energy to make the gathering a success, and it was to a large extent owing to his efforts that the affair passed off so well.

**SORE.**—The officials of the Midland Counties Chemists' Association are somewhat indignant at the refusal of the Pharmaceutical Council to give them a grant towards their library fund. They refer to the thousands spent on buildings "for the benefit of Londoners," and say that as 62 of their members are paying annual subscriptions to the Society their application for a grant of 25*l.* was not unreasonable. They are vexed now that they asked for it, and have resolved to help themselves.

### CHELLENHAM.

**A CHEMIST SERIOUSLY ASSAULTED.**—Arthur Henry Clarke, aged 45, chemist's assistant, was charged at the Police Court on January 6 with assaulting his master, Thomas F. Board, the previous day. The evidence of the prosecution was to the effect that on the defendant's return from dinner on Wednesday, the complainant asked him where he had put some packages of sulphur, and in reply received a blow from behind and a kick which caused him to fall on a stone jar, which was shattered to pieces. He was rendered insensible. The prisoner sought to show that he had been subjected to a system of bullying and annoyance which had provoked him. The Bench imposed a fine of 20*s.*, with 11*s.* costs, or three weeks' imprisonment.

### CONGLETON.

**THE CHEWING GUM CASE.**—The inquest on the child who was supposed to have died from eating chewing gum was resumed at Congleton on Wednesday, February 5. Mr. R. T. Barnes, solicitor, Liverpool, attended the inquest on behalf of Messrs. Adams & Co., Liverpool, the makers of the chewing gum. The principal evidence was that of Mr. Carter Bell, public analyst. His examination of the contents of the child's viscera did not result in the discovery of anything which would have caused death. He did not find any trace of chewing gum in the stomach. He examined a sample of the chewing gum, and found that it consisted of from 5 to 10 per cent. of oil of peppermint, about 70 per cent. sugar, and the rest of a substance resembling gutta percha, and known to the trade as "gum chicle." This gum chicle was most sticky in its nature and adhered very tenaciously to the skin, from which it was removed with difficulty. He could imagine that if a child swallowed some of that gum chicle, irritation and inflammation of the intestines would take place and cause death. Oil of peppermint also was poisonous when partaken of in such large quantities. He considered the gum most dangerous for children to have, and disagreed with the



statement on the boxes containing the gum that it was perfectly wholesome and fit for children to take. He failed to detect paraffin in the sample. The amount of essential oil which he found in the stomach would be about one drop, but part of this might have come from the gum chicle itself, as it contained oil. Dr. P. M. Davidson, having given particulars of the medicines which he gave the child for the vomiting and purging, the jury retired for fifteen minutes, and then gave in their verdict, which stated: "We find that, as far as the medical evidence goes, we are of opinion that the deceased's death was caused from inflammation of the stomach and intestines, brought on by eating chewing gum, and we recommend that this substance be included in the Food and Drugs Act." The Coroner said he would transmit the recommendation to the Home Office. We may add that Mr. Cotterill, pharmaceutical chemist, was on the jury.

**MR. CARTER BELL ASKED TO EXPLAIN.**—At a meeting of the Cheshire County Council held at Chester on the day following the inquest, Mr. Carter Bell, in his quarterly report, said: "I wish to call special attention to the two samples of chewing gum. This delectable sweetmeat, specially prepared for young children, was made up of sugar, gutta percha, and flavoured with aniseed. It must be palpable to all that gutta-percha, though made tasty with sugar, is not the sort of sweet a careful parent would recommend to its child; if there is a childish demand for "chewing gum," let it be sold as plain gutta-percha and not sweetened with sugar." In reply to a question by Dr. Hewitt, the Chief Constable (Colonel Hamersley) said he did not know whether any steps had been taken to prosecute in the case of the "gum." He did not know whether it had been taken up by the police or by the ordinary inspector. The subject then dropped, but later in the day Dr. Hewitt rose and said it was only fair to the Chief Constable to state that Colonel Hamersley had shown him a report to the police by the county analyst with respect to the case of "chewing gum," and the analyst had reported it pure. (Laughter.) He had suggested to Colonel Hamersley, therefore, that he should write to the county analyst for an explanation of why, when it was reported pure, he should have made a special point of it in his report. It was especially necessary that this should be done, seeing that the analyst had reported that he was unable to attend that meeting owing to his having to attend an inquest on a case of poisoning by "chewing gum."

#### LIVERPOOL.

**ANNUAL DINNER.**—The annual dinner of the Liverpool Chemists' Association will be held on March 6. A committee has been appointed to arrange the details.

**ANOTHER SHOP CLOSED.**—On Monday last the fixtures, fittings, utensils, and balance of stock of the business carried on for many years by Mr. William Bowman, 100 Duke Street, were sold by auction, and the premises cease to be used for the purposes of pharmacy.

**HARMONIOUS DRUGGISTS.**—The employés of Messrs. Evans, Sons & Co., Liverpool, on Tuesday last, held a social meeting in the rooms of the Y.M.C.A., Mount Pleasant. Mr. W. P. Evans occupied the chair. A varied and interesting programme of songs, recitations, and music was rendered by Mrs. W. P. Evans, Mr. M. Higginson and several of the staff. The chairman, in the course of his remarks, suggested the desirability of continuing through the summer, by means of a cricket club, these pleasant reunions.

**PHARMACEUTICAL STUDENTS' SOCIETY.**—At the meeting of this Society held on January 6, Mr. Johnson, Vice-President, in the chair, Mr. Robinson, the retiring treasurer, presented a financial report, showing a balance in hand of 4*l.* 0*s.* 6½*d.* Mr. Mitchell was appointed in Mr. Robinson's place. Mr. Wyatt drew attention to a homœopathic prescription which he had had to dispense containing tr. rhus, 3*j.*, vaseline 3*ij.*, and said he had found great difficulty in mixing the tincture with the vaseline, and, in fact, was unable to prepare a presentable ointment until he added a dram of castor oil, when a perfect emulsion was obtained. He had found castor oil of great use also in mixing liq. plumbi subacet. with vaseline. The

lawfulness of this addition gave rise to some discussion. Messrs. Wokes and C. F. Symes have been elected members of the council.

#### MANCHESTER.

A LOCAL DRUGGIST advertises in one of the daily papers for a "female acquainted with the trade."

**THE CHAMBER OF COMMERCE AND THE CHEMICAL TRADES.**—The chemical and allied industries committee of the Manchester Chamber of Commerce has now set to work. Amongst the members are:—Mr. E. P. Potter, representing the alkali and bicbromate industry; Mr. W. H. Bailey, chemical machinery; Mr. F. S. Bailey, chemical produce; Mr. F. B. Bengier, pharmaceutical products; Mr. Thomas Jackson, the acids trade; Mr. Ivan Levinstein, coal tar colours, pigments, and sundry fine chemicals; Mr. Joseph Moseley, the indiarubber trade; Mr. J. E. Riley, the alkali trade; Mr. Vernon Roberts, colours and pigments; Mr. David Shaw, oil refining; Mr. David Spence, the alum trade; Mr. George Woolley, pharmaceutical products; Mr. H. Higginbottom, chemical merchants; Mr. John Moir, oil refiners and distillers. Mr. Ivan Levinstein has been elected chairman; Mr. Thomas Jackson, J.P., deputy chairman, and Mr. George E. Davis, hon. secretary.

**COCAINE IN DENTISTRY.**—Our Manchester correspondent writes:—In view of the correspondence which has been appearing in THE CHEMIST AND DRUGGIST, it is, perhaps, worth while mentioning that according to a report submitted to the annual meeting of governors on Monday, 8,308 extractions of teeth have taken place at the Victoria Dental Hospital of Manchester during the past year, and in only 1,304 cases were anæsthetics administered. On inquiry, I find that when cocaine was first brought out a large number of experiments were made with it at the hospital, and in a considerable number of cases it was used in the extraction of teeth, but its use was afterwards discontinued, and now nothing but gas is employed when an anæsthetic is required. Several well-known dentists in the city report a similar result, the ground of their objection to the use of the drug being that one or two deaths have been caused by it, and that where the consequences have not been fatal, they have, in many cases, been very disagreeable. At least one dentist, however, almost invariably uses cocaine when an anæsthetic is asked for. He finds that certain teeth, or stumps of teeth, may be safely and painlessly taken out with the cocaine—his failures, it is said, do not count two in a hundred—but that teeth in certain other positions may not be so dealt with. His experience enables him to say exactly in the case of which particular teeth it is desirable to employ cocaine.

#### NEWCASTLE-ON-TYNE.

**CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.**—At the meeting on Wednesday, February 5, Mr. Frederick Park, vice-president, in the chair, the first serious business was a letter from Mr. A. J. Curwen, the writer of the paper on "Sugar and its Preparations," which was read at the last meeting. Mr. Curwen was dissatisfied with the reports which had appeared in the journals, and thought they would throw discredit on him and the association. Mr. D. H. Oxen replied to this, as he had, by request of the secretary, sent the reports. There had been no intention to slight the author, said Mr. Oxen; the reports gave a fair gist of the paper—a fact which others would testify to. He did not send a full report because the journals [THE CHEMIST AND DRUGGIST, at all events] had not space to spare for all the proceedings of assistants' associations. For that reason he left out all jokes "respecting the man in the moon," "whether the moon was made of green cheese," "the reason why Mr. Curwen gave his paper," and such expressions as "don't teach your grandmother to feed ducks," &c. feeling confident that no editor of an instructive journal would publish such. He concluded by expressing regret at the incident and that Mr. Curwen should think he had mutilated his original paper to bring discredit upon himself. Mr. J. Pike and Mr. T. Maltby Clague having spoken upon the subject, both agreeing that, if the report



was not better than, it was certainly as good as, the paper. Mr. John Pike, the president of the association, read a paper on "Photomicrography." This is the correct word, Mr. Pike explained at the outset, and after some remarks on the microscope and its advantages to the medical man and the chemist, stated that photomicrography is proving to be a valuable aid to the scientist, as it gives an enlarged record of researches and of progressive work such as could not by other means be acquired. Some of the finest photographs of bacteria and other microscopic organisms have been produced by Dr. Roux, Pasteur's assistant, and the microscopical investigations of Pasteur himself into the cause and spread of disease by microbes, to say nothing of other workers, had, no doubt, all been photographed and preserved. Dr. Koch, of Berlin, says that photographs are of the highest importance in investigating microscopic organisms, for if ever a pure objective perception, free from preconceived idea, is necessary, it is in these investigations, and the difficulty he is thinking of when making this observation is the ensuring that any two observers should see the same objects in the same aspects, with the same illumination and the same appliances. In the course of his lecture Mr. Pike photographed an object, and not only explained how the work can be done, but gave a lantern demonstration; and he well deserved the vote of thanks which was accorded to him on the motion of the chairman, seconded by Mr. Clague.

### SHEFFIELD.

A STUDENTS' NIGHT of the local trade society was given on Wednesday, a paper on "Concentrated Infusions and Decoctions," by Mr. C. D. Moffat, and one on "Pepper: Its origin, uses, and adulterations," by Mr. C. H. Twelves, constituting the fare. The former we print.

### IRELAND.

THE LATE MRS. MERRIN.—We reported last week the death of the wife of Mr. P. Merrin, M.P.S.I., of Dublin. We are informed that the sad occurrence was not sudden, as stated. We regret the error.

THE PRAIRIE FLOWER.—Sequah's musicians, enthroned in the now famous gilt coach, enlivened Cork last week by a general walk around the city and a liberal distribution to the gamins of some handfuls of small silver, which served to obtain for the company a right hearty welcome.

THE WEEK'S POISONINGS.—Ellen Murphy, a young married woman, residing at Antrim, died last week from the effects of a dose of strychnine, which she procured from a Belfast druggist to poison rats. John M'Lynn, a Dublin cardriver, celebrated his birthday by a draught of methylated spirits; and Francis O'Neill, druggist's porter, was conveyed to hospital suffering from carbolic-acid poisoning.

BELFAST HARBOUR RATES.—Arising from a general protest of the trading community of the North of Ireland, the harbour dues levied by the Belfast commissioners are likely to be reduced in the course of a few days, the present rates being as follows:—Aërated waters,  $\frac{3}{4}$ d. per cwt.; medicine bottles,  $\frac{1}{2}$ d. per cwt.; drugs and chemicals,  $1\frac{1}{2}$ d. per ton; mineral oils, 1s. per ton; perfumery, 2d. per cwt.; vitriol,  $\frac{1}{2}$ d. per cwt., &c.

CHEMISTS AND DRUGGISTS' ASSOCIATION OF IRELAND.—The committee of the Dublin branch of this association met on February 6, Mr. S. P. Boyd, M.A. (vice-president), in the chair. The hon. secretary read a letter from the president of the northern branch (Sir James Haslett), and a document stating in detail the salient points of the interview recently granted by the Attorney-General for Ireland, the substance of which, it will be remembered, was to be embodied in a statement to be forwarded to that gentleman for his information and guidance during the forthcoming session of Parliament. The chairman said he would endeavour to obtain a further audience with the Attorney-General as a preliminary to submitting the desired information. The annual general meeting of the association has been fixed for Friday, February 28, at the Leinster Lecture Hall, Molesworth Street Dublin, at 8 o'clock P.M.

### SCOTLAND.

#### ABERDEEN.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—The meeting held on Friday, February 7, was devoted to reading from papers contributed to the magazine. Mr. Curtis, president, occupied the chair. The first and longest paper from the magazine (of which Mr. Clark, pharmaceutical chemist, is editor) was an appeal in favour of the Curriculum Bill. All its advantages and disadvantages were detailed, and altogether the article must have changed the opinions of some regarding the curriculum. Strangely opposed to the doctrine of this paper was the next one, entitled, "What is the use of the Pharmaceutical Society?" This was a somewhat vindictive onslaught on the merits and proceedings of that society. The other two papers, "Homoeopathy" and "Medicine in Heathendom," were both admirable in their way, nearly all the members present having something to say about the former. The latter contained no little information on the strange recipes used by the medicine-men of heathen countries. Mr. Clark was thanked for his services and again requested to act as editor of the next magazine. A vote of thanks was accorded to the masters for their entertainment of January 29, so generously given and so successfully carried out. The next meeting, on February 21, is the occasion of a paper by Mr. Craig, entitled "Toleration."

#### DUNDEE.

"WATER" was the subject of the paper read at the meeting of the Chemists' Assistants and Apprentices' Association last week. Mr. James Petrie, the author of the paper, handled his subject very well.

A SUGGESTION has been made here for the establishment of a veterinary college in the town. It is supposed that it would supply "a felt want," but it is difficult to see where the want comes in. There are only four veterinary colleges in the kingdom, and three of them are in Scotland. Moreover, English and Irish students form the majority of the attendance at the colleges.

CO-OPERATIVE DRUGGERY.—The Eastern Co-operative Society, an association of working men, which has been most successful in its trading operations in the grocery and similar lines, has now made a start on the field of pharmacy. The society has arranged with one of the principal chemists in the town for the supply of drugs, including medical prescriptions to the members. A good discount is allowed to the society off the members' purchases, and the total is summed up at the end of the year and distributed amongst the members. The co-operative society intends to establish drug and dispensing departments in connection with its own establishments should its present arrangements be largely taken advantage of by the members. A similar arrangement existed some years ago between the Professional Supply Association and another chemist, but it never came to much. In fact, the arrangement saved the town from the "professional" people starting their own dispensing department. Probably the same experience may again result, but the fact that the members will have to pay ordinary prices and receive their discount from their society is a dangerous element in the case.

#### EDINBURGH.

THE "STORES" in this city have secured the services of Mr. William B. Dougall, secretary of the Assistants' Association, for the supervision of their pharmaceutical department.

ASSISTANTS' VIEWS OF CUTTING.—When cutting shops were first opened in Edinburgh there was a disposition on the part of assistants to boycott them. Now all this is changed, and there is keen competition for vacancies when they occur. The reasons advanced for this revolution are shorter hours, no Sunday duty, and better pay.

NORTH BRITISH BRANCH.—There will be an evening meeting of the Pharmaceutical Society here on Wednesday, February 19, at 8.30. The papers to be read are:—"Notes on some Gum Samples," by Thomas Mabey; "The Detection and Separation of Sodium from Lithium," by Isaac W. Thomson; "A Simple Process for Estimating the Acidity of



Milk," by Isaac W. Thomson; "Note on Adulterated Anise Fruit," by William Lawson.

#### GLASGOW.

GLASGOW CHEMISTS AND DRUGGISTS' ASSISTANTS' ASSOCIATION.—At the fortnightly evening meeting, on February 5, Mr. John Currie read a useful paper on "Hygiene." Two papers are promised for February 19. "Useful Hints" by Mr. A. McKellar, and "Suppositories" by Mr. D. Steven.

A LADY BOUNTIFUL.—On Saturday afternoon, February 8, the workpeople in the chemical works of Messrs. John Poynter & Co., Limited, Greenock, after receiving their usual pay, had a pleasant surprise in store for them, through the kindness and generosity of Miss Edgar, Clydenek, Uddingston, one of the chief shareholders in the company, who had provided handsome gifts of money for distribution among the workers on the basis of 20s. for each year of service in the establishment, and it is gratifying to learn that the men and women carried home with them, in addition to their ordinary wages, from 26% downwards. The total sum thus distributed amounted to upwards of 500%. The late Mr. John Poynter was a model master, and was greatly esteemed by his employes.

### General and Provincial News.

A MERCHANDISE MARKS BILL on the lines of the British Act is about to be discussed by the Swiss Legislature.

A QUININE FACTORY IN BRITISH INDIA.—The *South of India Observer* states that there is a probability of the Wynaad Planters starting a quinine factory of their own, for the treatment of bark grown in their district. If by united effort such a factory could be established, it is thought that much benefit would result to the planter, in the saving of freight on a large quantity of useless material now transported.

CARBOLIC POISONING.—Mr. Clarke, who resides on the Bury Road, Stowmarket, on Thursday of last week, drank some carbolic acid which had been placed as a disinfectant in a black bottle, supposing it to be porter. Mr. Fred Brett (sanitary inspector), who happened to be near, administered warm mustard and water, which acted as an emetic, and Dr. Sheridan was speedily sent for, but the poor man's throat is much burned.

INCOMPETENT DRUG SELLERS.—In his report to the Cheshire County Council Mr. Carter Bell, analyst for the county, gave a record of his work, and stated in regard to a sample of cream of tartar that the inspector asked for cream of tartar and was supplied with a packet of bicarbonate of soda, which was labelled cream of tartar. "One can quite understand," says Mr. Bell, "such a person selling oxalic acid for Epsom salts with the idea that as the appearance is the same so must the effect of the drug be. This cream of tartar case is only another illustration of how necessary it is that some law should be passed for not allowing incompetent people to sell drugs. Only a few weeks since a grocer sold cream of tartar in mistake for arrowroot, thus causing the death of a child. The sample of vinegar was not pure malt vinegar, but simply acetic acid and water coloured with burnt sugar. None of the large vinegar firms would supply such an article to the trade."

MISTAKING THE MEDICINE.—On Saturday afternoon last a rural postman, named Charles Johnson, of Shifnal, near Birmingham, had a narrow escape from death. Johnson is the postman on the Tong and Ruckly roads, his last calling-place being Neachley Hall, where he works until time for his return journey at 5 P.M. He was in the habit of carrying a bottle of medicine, as he suffered from a pain in the chest. On Saturday afternoon, being hurried in starting homewards, he picked up the bottle of medicine, as he thought, from the saddle-room window and put it in his pocket. On crossing the lawn in front of Mr. E. Wadlow's house, Stanton Hill, feeling the pain in his chest, he drank from the bottle, which proved to contain solution of ammonia, and he fell down insensible. A groom who was near the house ran to

his assistance, and with help carried him indoors, where he regained consciousness and pointed to his throat and the bottle. An emetic was administered, and Mr. Wadlow had him placed in a trap and driven to Dr. Gihson's surgery, Shifnal, where proper remedies were applied, and the unfortunate man is now slowly recovering.—An inquest was held at the Queen's Hotel, Birkenhead, on February 8, touching the death of Jane Develling, aged 42 years, wife of John Develling, a rigger, living in Windsor Street, off Oxtow Road. On Thursday night, while deceased was having supper, she went to the cupboard to get a bottle of castor oil, but instead she inadvertently took a bottle containing lotion for neuralgia. She poured a portion of this into a glass of beer and drank it, and was shortly afterwards seized with violent pains and became unconscious. Her husband conveyed her to the Borough Hospital, where remedies were applied, but without avail, the unfortunate woman dying in about an hour after the occurrence. The jury returned a verdict of "Accidentally poisoned."—An inquest was held on Saturday, February 8, at Fisher Gate, Birmingham, on the body of Ernest Wright, aged six months, the nephew of Samuel and Harriett Bower, 14 Poplar Street. The child had been under the care of its uncle and aunt on account of its mother's illness, and had been very weak and sickly ever since birth. Last week it was worse than usual, and its aunt gave it a mixture of glycerine and syrup of rhubarb to relieve its cough. On Thursday morning Mrs. Bower mistook a laudanum bottle for the one containing the syrup, and dosed the deceased with laudanum in the place of its usual medicine. Mrs. Bower at once found out the mistake, and the child was taken to the dispensary, where it was attended to. It died the following morning at one o'clock. Mr. H. E. Belcher, assistant-surgeon at the Nottingham General Dispensary, said that when the child was brought to him it bore marks of opium poisoning. The symptoms, however, were not decided. He gave the child an emetic, and then washed its stomach out. After treatment it seemed a little better. He was of opinion that the cause of death was opium poisoning. The jury returned a verdict of "Death by misadventure."—The Bradford Borough Coroner held an inquiry on the 10th inst. concerning the death of Joseph Lawnor, fifty-nine years of age, of Duncan Street, which took place on Thursday last. It seems that on Thursday the deceased, after complaining of feeling unwell, decided to take some castor oil. He got hold of a bottle which he thought contained castor oil, and drank a quantity of its contents. The bottle contained camphorated oil, and immediately after taking it the deceased became very ill, and died in a few hours in spite of the efforts of Mr. Hayes, surgeon, who had been called in, to bring about his recovery.—The jury found a verdict of "Death by misadventure."

### Obituary.

CHAPMAN.—On February 6, at the Town Hall, Hull, Alderman W. F. Chapman. Aged 65. Mr. Chapman was suddenly attacked with apoplexy whilst attending a meeting of the Town Council on Thursday of last week, and although several members of the council, medical men, at once attended him, he died the same afternoon. He had been in delicate health for some time, this being the third attack of apoplexy. Mr. Chapman had been a member of the Council since 1859, when he entered for Holderness Ward. He continued to represent the ward until he was appointed Alderman in 1871. In November of that year he was not re-elected to the aldermanic bench, the late Mr. Waller taking his place. Mr. Chapman again appealed to the constituents who returned him, on the 18th of the same month in the same year (1871). He continued to sit as a representative of the ratepayers until 1878, when he was again appointed an alderman *vice* Mr. Anthony Bannister, and held this honourable position with dignity to himself and credit to the town up to the time of his decease. He also acted as overseer for the parish of Daypool. Mr. Chapman carried on business as a chemist and druggist on the Holderness Road, and was in his youth apprenticed to the late Dr. Boulter, who was during his lifetime a member of the Corporation.



## Pharmaceutical Society of Great Britain

### EVENING MEETING.

THE principal item on the programme on Wednesday evening was a communication from the Research Laboratory of the Society dealing with

#### THE NEW ANTISEPTIC

lately introduced into surgery by Sir Joseph Lister. This is the double cyanide of mercury and zinc, so called, but shortly after the eminent surgeon began to use it there arose a doubt as to its composition, and it was at this point in September last that the resources of the Research Laboratory were called in. Since that time Professor Dunstan and Mr. Block have been working at the compound, and the results were now brought forward. The introductory part of the paper was bibliographic in character. The formula generally given to the double cyanide is  $\text{HgZnCy}_4$ , and it is said to result when the double cyanide of zinc and potassium and mercuric chloride are allowed to interact, or better when the double cyanide of mercury and potassium is acted upon with zinc sulphate. All the text-books say that the precipitate which forms in each case is a compound, of which  $\text{HgZnCy}_4$  is the simplest expression. Professor Dunstan traced this statement to Gmelin, and found that Gmelin had taken some experiments by Rammelsberg, and, working them along with acknowledged facts, in regard to the constitution of a double cyanide of mercury and cadmium, constructed for himself the formula now generally accepted. From this point Professor Dunstan treated us to a good deal of detail regarding the combinations of mercuric cyanide with other metals, all of which, though germane to the subject, it will be of advantage to leave out here. Those interested will find the matter fully gone into in Watts's Dictionary under Cyanides.

The curious thing about the new antiseptic is, that when it is washed with water it loses mercuric cyanide. Why is this? Is the salt a true double cyanide which is decomposed by water? or is it a mechanical mixture of mercuric cyanide and zinc cyanide? The investigators endeavoured to answer these questions. First they made the "compound" in four ways:—

- I. By adding a solution of zinc sulphate to one of double cyanide of mercury and potassium. This was Lister's method. It yielded a white powder containing 17.7 per cent. of mercuric cyanide (total), 2.86 per cent. being soluble in water, 67.85 per cent. of zinc cyanide, and about 10 per cent. of zinc hydrate as an impurity. In this and all subsequent experiments it was found that the compound could not be obtained free from zinc hydrate, but it is questionable if it exists as such or as zinc hydroxycyanide. Using this method with much more water, a compound was obtained containing only 6.7 per cent. of insoluble mercuric cyanide.
- II. By acting on double cyanide of zinc and potash with mercuric chloride, a product was obtained containing  $\text{HgCy}_2$  9.67 per cent., no soluble  $\text{HgCy}_2\text{ZnCy}_2$  80.61 per cent., and  $\text{ZnH}_2\text{O}_2$  7.3 per cent.
- III. In the third method double cyanide of zinc and potassium and double cyanide of mercury and potassium were brought together in presence of sulphuric acid and water. Result—a compound having a composition represented by  $\text{HgCy}_2$  8.46 per cent. (none soluble),  $\text{ZnCy}_2$  84.9 per cent., and  $\text{ZnH}_2\text{O}_2$  6.9 per cent.
- IV. It was hoped to make a good "compound" by dissolving mercuric oxide and zinc carbonate in hydrocyanic acid, but the result was a failure, the dried powder showing only 1.6 per cent. of mercuric cyanide.

It is perfectly evident from these results, arrived at after careful analysis by approved methods, that the compound represented by the formula  $\text{HgZnCy}_4$  does not exist. If the new antiseptic is a double salt at all, its percentage composition shows that in the molecule the mercuric cyanide could only be present to the extent of a fraction of a molecule—a circumstance which Professor Dunstan believed to be possible, but all his experiments went against that view. There

is no doubt of the fact, however, that the mercuric cyanide exists in it in two forms, one soluble in water, the other not soluble. Why is part of it insoluble? It is either (1) chemically combined with the zinc cyanide, or (2) exists as hydroxycyanide of mercury in union with zinc cyanide, or (3) as hydroxycyanide of zinc in union with mercuric cyanide, or (4) the mercuric cyanide is occluded by the zinc cyanide. Professor Dunstan addressed himself to all four problems, and his "irresistible logic" disposed of 1, 2, and 3. The third is the best of the three, but more probable than all is the occlusion theory. We are to suppose, in this case, that most of the molecules of mercuric cyanide as they are liberated are covered up by molecules of zinc cyanide, and as the latter is insoluble water cannot get at the former. But if we can break up the aggregations the mercuric cyanide would be brought into the region of solubility. So the investigators proved by experiment. They took a sample containing 15 per cent. of insoluble cyanide, moistened it with water, then heated it, so that the steam would break up the problematical aggregations. The experiment succeeded, the first steaming resulting in the reduction of insoluble mercuric cyanide to 12 per cent., the second to 10.46 per cent., the third to 9.09 per cent., and the fourth to 8.26 per cent. There was still another way of proving the theory, viz., by boiling the "compound" with water, and then drying rapidly. A single trial enabled the investigators to extract 14½ per cent. of the mercuric cyanide in this way, and they showed that this was not the result of hydrolysis. Obviously, therefore, the two cyanides are not in chemical combination. The investigators detailed corroborative experiments.

The experience gained so far suggested the possibility of making a compound containing more mercuric cyanide than Lister's salt. This would be by using as little water as possible for dissolving the zinc sulphate and the double cyanide of mercury and potassium, and drying carefully. It was expected that the result would be that the two metallic cyanides would cling more closely to each other, and the result justified the supposition, for on trying, a "compound" was obtained which contained  $\text{HgCy}_2$  36.17 per cent. (insoluble) and  $\text{ZnCy}_2$  64 per cent. Finally some precautions were mentioned. Double cyanide of mercury and potassium is made by dissolving mercuric cyanide in a solution of potassium cyanide (95 per cent., not the fused commercial article, which contains cyanate and carbonate), and adding zinc sulphate to the solution. The double cyanide crystallises out. The precautions regarding the use of water have already been noted: the more there is used in effecting solution the less insoluble mercury will the precipitate contain. Direct heat must not be used, and the precipitate should be dried over caustic soda.

#### THE POINTS IN THE DISCUSSION

were provided first by Sir Joseph Lister, who was greeted with applause. He said that the investigation had brought out three circumstances which he thought were very valuable. First, it was not possible to wash away all the mercurial element from the "compound;" so that we could always have in it a certain constant quantity of that element, although manufacturers used different quantities of washing water. Secondly, a variation in the amount of water used for solution reduced the quantity of the mercurial element. Manufacturers would have to look to that; and, thirdly, the ingenious occlusion hypothesis had enabled Professor Dunstan to bring about an increase of the mercurial element. He did not doubt that this compound would possess increased antiseptic value. It might prove irritating, but that was a matter for trial. He had tried it on himself, and graphically described his experiment. Taking a piece of rag, he spread a little of the preparation, made into "mud" with water, upon it; this was placed on the forearm, then covered with macintosh, then with xylouite tissue, and finally with gauze, which was brushed over with collodion. He kept it on for twenty-four hours. At the end of that time there was a little redness at the edge of the gauze, a little also below where the macintosh overlapped the rag, but where the cyanide was on the skin there was absolutely no irritation. This brought a round of applause, which was continued when Sir Joseph proceeded to thank Professor Dunstan for his labours, and expressed himself as impressed with great admiration at the existence of the research laboratory, and the extremely handsome way



in which the Society opened it up to students of pharmacology. In the advancement of that branch of science, and of others of a kindred nature, he was of the opinion that it was of the utmost importance that Great Britain should not lag behind, as we have had to do in other branches, owing to restrictive laws. There was no cruelty here. (Laughter and applause.) He believed that the three years' trial of the laboratory was now nearing an end, but he earnestly trusted that the Council of the Society would carry it on indefinitely.

Mr. MARTINDALE was the next speaker, and as he had worked on the subject for Sir Joseph Lister he gave the meeting several points. He was able to corroborate most of Professor Dunstan's statements, and said that the investigation elucidated several difficulties which he had encountered, but which it was impossible to investigate in a working pharmacy. For instance, he made his double cyanide of mercury and potassium by dissolving mercuric oxide in a solution of potassium cyanide, and adding an acidulated solution of zinc sulphate to it. He sometimes got less precipitate than at other times, and he now knew why, viz, because the heat evolved in adding the mercury to the potash solution helped to form soluble mercuric cyanide.

Mr. Moss complimented Professor Dunstan, and asked what he meant by "cold water."

The PRESIDENT asked why "his young friend" used the word "occluded." It was in a different sense from what Professor Graham coined the word for. The occlusion of gases, such as hydrogen, by spongy platinum and palladium, was quite a different thing from the mechanical mixing of two solids, and, as one of the old school, he did not like Professor Dunstan's application of the term.

Professor DUNSTAN replied that the substance was not a chemical compound, nor was it a mechanical mixture. He used the word "occluded" in the grammatical sense—the mercuric cyanide was shut up by the zinc cyanide. He did not think that Professor Graham meant to restrict the word to gases.

The PRESIDENT: Oh! but he did.

Professor DUNSTAN: Well, he had no right to. (Laughter.) Moreover (he continued) since Graham's day it had been shown that hydrogen and palladium formed an alloy. There could be no question of occlusion in that. (Renewed laughter.) Mr. Martindale's way of making the double cyanide of mercury and potassium was about to be criticised on the assumption that the caustic potash liberated in the reaction would vitiate the final result; but Mr. Martindale reminded the Professor that alkali was neutralised by the acid in the zinc solution: so the speaker passed on to Mr. Moss, telling him that the cold water was at a temperature of 12° to 15° C.

#### RECENT DONATIONS TO THE MUSEUM.

Regarding these Mr. Holmes, the curator, had a paper ready. But it was 9.45, and there were urgent reasons for getting the audience into the coffee-room before 10. In the circumstances, Mr. Holmes let his paper drop, and gave the meeting five minutes' description of his specimens. One was the berry-like fruit of *Kraussia coriacea*, a South African plant, which was alleged to have caused the death of several children who ate the berries. Professor Cash, of Aberdeen, had experimented with the berries, and found them to be inert. The explanation was provided by Mr. Brown, of Kew, who states that there is a plant very like *Kraussia* which grows in the same district; this is *Acocanthera venenata*. It has a plum-like fruit, and it is poisonous, causing disuria. Mr. John Humphreys, an old Square student, now in Hong Kong, had sent home some samples of *Cinnamomum cassia* bark, one of the knives used for cutting the bark, and a spoke-shave used for taking off the outer bark, whereby a fine cassia, almost equal to Ceylon cinnamon, and reserved for the Chinese market, is obtained. These notes promised to be very interesting—if we had heard them. A sample of oil of lavender and one of oil of rosemary were sent by Mr. J. C. Sawyer, of Brighton, who has commenced to cultivate the plants and to distil the oils. Mr. Holmes said Brighton was a good place for lavender and rosemary, and the samples were exceptionally fine. Two samples of false chiretta were upon the table, and a collection of Indian drugs from Dr. Dymock. One of these was asafetida, in the largest tears

Dr. Dymock had ever seen; but Mr. Holmes was able to beat it with a sample obtained in London, "the drug market of the world"—a remark which brought a smile to Mr. Umney's face and a little applause from the audience.

#### PARIS SOCIETY OF PHARMACY.

At the adjourned meeting of February 12 President Vigier presented, on behalf of the whole society, to their Perpetual Secretary their heartfelt sympathy for his recent loss, to which M. Planchon answered returning his sincere thanks for the marks of friendship and affection he had received from his fellow-members.

In accordance with the conclusions of the committee's report, a gold medal was handed to M. Belzunce for his work on the formation of ergot; a silver medal was also awarded, but not delivered, he not being present, to M. Catillon for his investigations on ouabain.

A very long discussion followed on a periodic subject—namely,

#### THE ASSAY OF SULPHATE OF QUININE.

M. Prunier led with a rather lengthy paper on the Codex assay process—that is, Kermer's test, modified—and proposed various slight changes to improve its accuracy. Next MM. Marty and Petit gave their opinions on some of the points raised, but it cannot be said anything of much importance was elicited. The conclusions arrived at were that the assay in question is far from perfect, and too much should not be expected from it; that the chief cause of discordant analyses is the existence of a double sulphate of cinchonidine and quinine, which is of very frequent occurrence and must always be kept in mind; and that a medicinal sulphate of quinine need not be chemically pure. All of which, if not new, is useful to remember, as is the necessity of strictly adhering to the official directions as modified by the Society of Pharmacy.

M. Planchon next read, translated from the English, an article on

#### INDIAN YELLOW OR "PURREE,"

M. Ferrand on the subject gave some interesting information on the way purree is prepared for fine oil paints. The article, as it comes, is far from consisting of pure yellow pigment. The substance has to be rubbed to fine powder, and repeatedly washed with cold water. The washings are of a deep red colour at first, gradually vanishing, and carry off between 40 and 50 per cent. of the crude material. The purified article then appears in the shape of an exceedingly bright yellow powder, which only requires to be dried and ground in oil. It is much esteemed by painters on account of its brilliancy and durability.

#### PHENOLS AND CAMPHOR.

M. Léger presented some specimens of the combinations in question. After having considered them simple mixtures, he had changed his opinion, as he explained at a former meeting, and succeeded in proving they are real combinations—far from stable it is true, yet combinations. The beta naphthol and camphor combine in the proportion of 3 equivalents to 2; resorcin and camphor, 1 to 1; and alpha naphthol 1 to 1 of camphor. The resorcin combination can be obtained in definite crystals; on the contrary, the naphthol combinations are liquid, and are purified by causing the excess of camphor to crystallise out by intense cold.

#### THE NEW ARTIFICIAL MUSK.

M. Ferrand showed a sample of the new chemical wonder. The article has been so fully described in this journal that we need not give the author's introduction. M. Ferrand said perfumers are now having it on trial to see how it stands wear and tear. From his own observation he remarked that, on dissolving artificial musk in alcohol, most of the smell disappears, but reappears again on the addition of water or evaporation of the solvent. Acids somewhat impair the odour; ammonia and alkalis, on the contrary, develop and increase it, as they do for real musk. Consequently it seems just the thing for scenting soaps. The communication ended a very long and interesting sitting.



## Pharmaceutical Society of Ireland.

THE monthly meeting of the Council was held on Wednesday, February 5, at 11 Harcourt Street, Dublin, at 3 P.M. The President, Mr. Charles Evans, was in the chair, and the other members of the Council present were the Vice-President (Mr. Wells), Professor Tichborne, Dr. Burnes, and Messrs. Biggs, Hayes, Hodgson (treasurer), and Simpson.

### A LETTER OF CONDOLENCE

to Mr. Merrin, a member of the Council, on the death of his wife, was suggested by the President. Mr. Hodgson seconded the proposal, which was unanimously agreed to.

### THE PHARMACOPŒIA ADDENDUM.

A letter was read from Dr. R. Quain, Chairman of the Pharmacopœia Committee of the General Medical Council, requesting the assistance and the opinions of the pharmacists of Ireland in connection with the preparation of an Addendum to the British Pharmacopœia of 1885.

The Registrar was directed to write to Dr. Quain stating that the Council will have much pleasure in assisting in the matter, and that they were obliged to the Committee for having brought the matter under their notice.

### A RESIGNING MEMBER.

Mr. R. J. Downes, L.P.S.I., had written resigning his membership, but it was resolved to ask him to reconsider his decision.

### GEORGIA RECOGNISES THE IRISH CERTIFICATE.

Mr. R. Armstrong, of Cootehill, had inquired whether the licence of the Society was accepted in Georgia, U.S.A. The U.S. Consul in Dublin had been applied to, but was not able to answer with certainty. Consequently the Registrar had written to Mr. James Hartford, of New York, a licentiate of the Society, and Mr. Hartford had forwarded the following letter which he had received from Mr. H. R. Slack, analytical chemist, of the Secretary's department of the Georgia State Board of Pharmacy:—

January 16, 1890.

DEAR SIR,—Your letter of the 7th, enclosing letter from Mr. A. J. Ferrall, received, and in reply will state that the Georgia State Board will recognise a licence from the Pharmaceutical Society of Ireland, provided same is granted upon examination. The fee is 5 dollars for licence for the first year, and 2 dollars annually thereafter.

The letter enclosed a printed slip of regulations on the subject. One of these read as follows:—

It shall be the duty of the said Board to grant licences to pharmacists who have obtained a diploma from an authorised foreign college, or institution, or examining board, and who shall exhibit same to the Board of Pharmaceutical Examiners.

Mr. Hartford, in enclosing Mr. Slack's letter, wrote as under:—

New York, January 21, 1890.

DEAR SIR,—I duly received your letter of December 24, and would have replied sooner, but was waiting to hear from Georgia. I have now much pleasure in handing you the information required. You will notice that the Georgia Board of Pharmacy will recognise the diploma of the Irish Society. As to the other States, I regret I cannot give you the information required, but my idea is that if they will not recognise your diploma your graduates need have no fear of the examination. The business, however, conducted in this country by the pharmacist is so different from the old country, that he would have to serve his time over again in order to learn it. Enclosed you will find money-order for two of my subscriptions.

The Registrar was directed to write thanking Mr. Hartford for the trouble he had taken.

On the motion of the Vice-President, seconded by Professor Tichborne, Mr. Hartford was now elected a member of the Society.

### THE OFFICIAL REPORT ON THE EXAMINATIONS.

A letter was received from Sir William Kaye, Q.C., Clerk to the Privy Council, enclosing the following report made

by the visitor, Dr. George F. Duffey, on the examinations held by the Society during the year 1889:—

I have the honour to submit, for the information of your Excellency and of Her Majesty's Privy Council in Ireland, the following report on the examinations held by the Pharmaceutical Society in Ireland during the past twelve months. As usual, both the Preliminary examinations and the Final, or pharmaceutical, examinations for the licence took place quarterly, and were conducted by the same examiners as those in office last year. Fifty-four candidates presented themselves for the Preliminary examination, and thirty-two for the licence. These figures show an increase during the year of two in the number of candidates for the Preliminary, but a decrease of eight in those for the licence. Thirty-one candidates were successful and twenty-three failed at the Preliminary examinations. Nineteen obtained the licence and fourteen were rejected at the final examinations. The following table shows the number of candidates annually, since I have been the visitor, for each of the two examinations, and the percentage of passes and rejections:—

Year	No. of Candidates		Percentage Passed		Percentage Rejected	
	Prelim.	Licence	Prelim.	Licence	Prelim.	Licence
1886	46	33	57.8	33.4	42.2	66.6
1887	45	44	52.2	57	47.8	43
1888	52	41	54	61	46	39
1889	54	32	57.4	57.6	42.6	42.4

It will be noticed, from the communication, dated March 13, 1889, sent by the Registrar of the Pharmaceutical Society for the information of your Excellency in Council, in reply to my last report, that the suggestions I had the honour to make in it were approved by the Council of the Society. The attention of some of the examiners was directed to certain matters I referred to, and the proposals for the improvement of portions of the examinations that I thought it advisable to make were at once adopted and acted upon. I may mention that my recommendation as to the advisability of examining candidates for the licence, as to their knowledge of the legal obligations imposed upon chemists and druggists in the sale of poisons, appears to have commended itself to the visitor of the Pharmaceutical Society of Great Britain, as, in his report, dated May 18, 1889, to the Lords of the Council he made a similar suggestion.

Analysing the results of the Preliminary examination, it appears that of the fifty-four candidates who presented themselves for this examination thirty-one, or 57.4 per cent., passed, while twenty-three, or 42.6 per cent., were rejected. Fifteen of the unsuccessful candidates had also failed at one or more previous Preliminary examinations. Four of these were rejected during this year for the fourth time. The answering, as a rule, was generally indifferent. The highest percentage obtained by any candidate was 72, the percentage on the entire course, entitling a candidate to pass, being 40. The greatest number of failures was in English (grammar, composition, and dictation) and in the subject of weights and measures. Eighteen candidates failed in each of these subjects, and sixteen failed in arithmetic. A large number of candidates failed in two or more of the subjects of the examination. Thirteen of the unsuccessful candidates did not obtain passing marks in Latin. But in addition to these thirteen there were at least as many more who were passed, but who also showed gross ignorance of the rudiments of that language. I cannot approve of candidates being allowed to pass their examination who, out of a possible maximum of twenty marks in Latin (easy translation and parsing), and ten marks in elementary botany, obtained only four and two, and two and three respectively; or of candidates who, from their inability to answer the most elementary questions in Latin parsing, did not obtain (in one case) either a single mark, or (in another case) only got one mark. The lowest percentage on which a candidate passed was 44. This candidate (who was not one of those above referred to) scored only two marks out of a possible ten for Latin parsing, and but one mark for elementary botany. In my last report I directed attention to the manifest importance of a good general education to the pharmaceutical chemist, and to the injury that would be done to the status of the Society, and to the character of its examinations, by allowing candidates to pass with merely superficial knowledge of some. I regret that the remarks I then made seem still to hold good. In the case of a candidate who fails to obtain a minimum qualifying standard of marks in one or two subjects, but whose percentage of total marks on the entire course might entitle him to pass, it would be well to consider the advisability—as is done elsewhere—of allowing him his examination in the subjects he has passed in. But he should be re-examined in the subject, or subjects, in which he has failed at the next Preliminary examination, or at some subsequent one within the succeeding twelve months, as might be determined, in each case, by the examiner or by the Council of the Society. If then successful he should be allowed to present himself for the Final, or pharmaceutical, examination without such partial re-examination causing him to lose his year (*vide* Pharmaceutical Examination Regulation I). As regards the examinations for the



licence I have but little to remark. They have been conducted with efficiency and with fairness to the candidates, and the percentage of passes—as the previous table shows—is satisfactory. The subject in which there were most failures was theoretical chemistry. Ten candidates failed to obtain the minimum pass mark in this part of the examination; but two of these, having answered up to the standard in the remaining subjects, were allowed the examination, after consultation between the examiners. In practical chemistry—a subject in which there were the largest number of rejections in former years—there were only six failures this year (= 16·2 per cent.). The fact that the improvement I noted in the answering and style of work in this subject in my last report has continued shows, I think, that I was then justified, even after a short experience of the result of the new extended curriculum for practical chemistry (*vide* Order in Council, March 21, 1888), in stating that it “had already produced good results.”

Mr. HODGSON: Don't we allow a candidate who has satisfactorily passed in certain portions of the Preliminary examination to come up afterwards and be examined in other portions?

The PRESIDENT: No; the whole thing must be gone through *de novo*.

Mr. HODGSON: How far would it be possible, if a boy be clever and pass brilliantly in one or two subjects and break down in the others, to allow him credit at a subsequent examination for what he has succeeded in passing in? It is done elsewhere.

The VICE-PRESIDENT: The objection to it is that a young man might “cram” in one subject and pass in it, and then “cram” in the others.

Mr. HODGSON: Dr. Duffey suggests the idea.

The PRESIDENT: I would quite approve of it; but candidates should not be allowed to come in prepared to be plucked in certain subjects.

The VICE-PRESIDENT: In the medical examinations they have a great many more subjects than we have, but if you fail in some and not in others you are afterwards allowed credit for the latter at a subsequent examination.

Mr. HODGSON: The candidate so coming up again might be made to pay a certain amount of fees the second time. He might be charged a guinea at the second examination.

The REGISTRAR: The second examination is now given free.

Mr. HODGSON: But he must come up *de novo*.

The PRESIDENT: Yes, and be examined again in the whole course.

The VICE-PRESIDENT: I think it is a mistake giving free examinations. We lose money by it.

Mr. HAYES: Last year thirty-two candidates were plucked, and their being allowed to come in again free meant a loss of 16*l.* 16*s.* to the Society in examiners' fees.

The VICE-PRESIDENT: In the English Society, if a candidate is stopped by one examiner, it puts him out.

On the motion of Dr. Burnes, seconded by the Vice-President, the report of Dr. Duffey was referred to the Law Committee with a view to their taking into consideration the suggestions just discussed, in connection with both the Preliminary and the licence examination, and reporting to the next meeting of the Council.

#### THE BRITISH PHARMACEUTICAL CONFERENCE.

A letter was received from the honorary general secretaries of the British Pharmaceutical Conference inviting the co-operation of the Society in an endeavour to increase the membership of that association. The VICE-PRESIDENT, as a regular attendant at the conferences, said these were a great help to the pharmacists, and on his motion, seconded by Mr. Briggs, it was resolved that the registrar be directed to reply, stating that the Council would be willing to send out circulars for the Conference with their calendar.

#### NO BANK HOLIDAY FOR THE EXAMINERS.

Mr. C. G. Draper, an examination candidate, had written asking whether, as Easter Monday will fall on the first Monday in April, the Preliminary examination of the Society will be held on that day, as the by-law says that the Preliminary examination shall be held on the first Mondays in January, April, July and October. It was agreed that without the express consent of the Privy Council no alteration of the date could take place.

#### VOTES OF THANKS

were passed to the proprietors of THE CHEMIST AND DRUGGIST for their DIARY for 1890; to the British Pharmaceutical Conference for their Year-Book of 1889; to the Pharmaceutical Society of Great Britain for their Calendar of 1890; and to the American Pharmaceutical Association for their Report of Proceedings, 1889.

#### COMMITTEE REPORTS.

A report of the Law Committee was passed. Reports from the other committees were referred to next Council meeting.

#### DR. SYMES ON PHARMACEUTICAL AFFAIRS.

(*Presidential Address to the Liverpool Chemists' Association. Delivered on Thursday, February 13, 1890.*)

THE notes for my remarks this evening were made before the publication of the draft Pharmacy Bill and the discussion thereon at Bloomsbury Square. I have deemed it better not to alter them in any way so that they may be put before you as an epitome of my own thoughts on the subject treated of rather than as a criticism on those of others. In the early years of my business career I not unfrequently, when the pharmacy was closed (say on Sundays), walked into the centre and took a survey from the opposite side of the counter to that on which I was accustomed to find myself, with the object of looking at things from a customer's point of view. I saw, perhaps, certain bottles on the shelves which required filling, a vacant place in one of the glass cases which should have been replenished with stock, in another a state of confusion where there should have been order, and thus soon found work for all the spare time likely to be at our disposal for the coming week. Having found these periodic surveys of considerable advantage, I had almost decided to ask you to spend a little time this evening in endeavouring to “see ourselves as others see us;” but a little reflection showed that, although I assumed the customer position, I really did not, and possibly could not, look at things from his point of view. I was merely taking an all-round look at things as they actually stood, with a full sense of my personal interest in having them right. Now I believe if we take British pharmacy as it really is for our consideration in the same spirit, and endeavour to find out what we have arrived at, where we are, and whither we are drifting, although the inquiry is sure to be imperfect we shall be better able to accept the responsibilities and discharge the duties which devolve upon us as an association and as individuals at what may be properly regarded as a critical period of our existence.

The subject is a wide one, and an attempt to deal with it fully would occupy much of your time and try severely your patience. I must therefore condense my remarks, and assume that as thoughtful men you have been watchful of events, and have, to some extent, reasoned out the probable results; that you have formed an opinion as to whether, either as a trade or profession, we are following a course calculated to lead to solid and lasting progress.

As an association we have existed for a period of forty years. Although many of the founders have passed away, there are still with us some who can tell the tale of its infancy, its struggles and growth, its periods of depression and those of success.

My personal acquaintance with it and membership date back some twenty-five years, during which time it has passed through some trying ordeals; but it has still continued, and now demonstrates its fitness by its survival. It has done good and useful work in the past, and the experiences of to-day will to-morrow be interwoven with its history; thus month by month and year by year we are writing that history in which each takes his part, and, I trust, will leave “footprints on the sands of time.” Like most provincial associations, it owes its origin, in great measure, to the Pharmaceutical Society. As a common parent, that Society has done something to foster good, healthy, and obedient children, but not always with satisfactory results. Some have ceased to exist, others exist



chiefly in name, whilst some, left very much to their own resources, have assumed a somewhat independent existence. As a whole, provincial associations cannot be regarded as very successful; this may arise from many, but chiefly from two, causes, viz., want of interest on the part of local members, and lack of support on the part of the parent society. The former is undoubtedly the more serious factor and carries the larger share of responsibility, for it is the duty of every man to do something for the general good of the craft to which he belongs. When local effort is not forthcoming the parent society has grounds for not aiding. It is not merely a question of pecuniary aid, valuable as that may be, but in many other ways provincial associations may be benefited.

We can scarcely regard Edinburgh as standing in the same light as other centres, but there, no doubt, local interest is stimulated by the support accorded to it from Bloomsbury Square.

Quite recently the President in his speech on Mr. Leigh's motion—"That prizes be offered to provincial students"—argued against it on the ground that it would tend to centralisation. Some eighteen months earlier I had in the same place argued that just as the general tendency of the Government of this country was towards decentralisation, so must any efforts for the better government and the furtherance of the interests of our body be. But I further held that there should be support from, and a certain responsibility to, the central authority. This latter is an important part of the principle and should not have been ignored, as on seeking further legislation, if anything like good, substantial, and permanent results are to be obtained, they must be the result, not of diplomacy, but of the joint efforts of the Pharmaceutical Society and provincial associations. Their interests being identical, their aim must be single, their efforts strong and united.

We must recognise this joint responsibility in the pursuit of the subject which I have proposed for our consideration; for, although it is a common practice to blame the Pharmaceutical Society for all the evils which exist, it must be borne in mind that the Society is what its members and the trade generally make it. Hence it is not only a question of duties performed or neglected by an association, but by individual members of the art also. While most chemists take some and many an active interest in general politics, how few trouble themselves in the smallest degree about the politics of their own body! Now, could this be altered, could we get every man who looks to pharmacy for his livelihood to take some real interest, not merely in himself and his personal pecuniary gain in its narrowest sense, but in the good of the body corporate, our cause would be materially advanced.

There is one point, however, on which nearly all are agreed and are willing to do their share—viz., in condemning and complaining of the present state of British pharmacy. On the passing of the Pharmacy Act, 1868, great hopes were entertained of the results which were to accrue, and it is scarcely necessary to say that much disappointment has been expressed at these not being realised. That Act was passed in days when stores scarcely existed, when branch shops were the exception, and it contemplated the individual pharmacist conducting his business personally or by the aid of assistants. It contemplated regulations which have never been complied with, restrictions which have never been enforced, and its intention has been wrongly interpreted by some of our judges, so that it is little to be wondered at if it is out of gear with the existing state of things. Two of these points have so recently been dealt with that I need not now enlarge upon them, but the non-enforcement of its requirements is a matter that deserves more attention than it has received. Section 16 of the Act provides that "nothing hereinbefore contained (mark the *hereinbefore*) shall interfere with the making or dealing in patent medicines." Then clause 17 provides that no poison contained in the schedule shall be sold unless labelled as such. Here, as a matter of course, the exemption does not apply, and every patent medicine containing a poison should bear a label to that effect. Now, the neglect of this provision, which is definite and clear, may be regarded by some as a trivial matter, but in reality it is not so. One of the chief objects of the Pharmacy Act was the protection of the public, and it is for that reason that restrictions are put on the sale of poisons. But what use are these when, by the non-adminis-

tration of the law, any person may sell without the least precaution any quantity of such poisons as chloroform, &c.? Had the provisions of clause 17 been duly carried out, not only the public, but the trade, would have been benefited. The unregistered dealers in drugs began by selling patent medicines because it involved no responsibility and they were free from restrictions, and, where ruinous cutting exists, it usually begins with these for the same reasons.

Had it been otherwise, it seems probable that we may have been relieved of much of this, as the public would scarcely care to have their groceries and poisons handed to them over the same counter. Of course, in large stores, where there is a separate drug department, or chemist's shop, as it were, within, this remark does not apply with equal force; but it seems clear that an amount of responsibility rests somewhere for unfulfilled duty both to the public and ourselves.

If, then, the Act has by want of adaptation and faulty administration failed to fulfil the purposes for which it was intended, by all means let us have a new one and endeavour to get that more perfect.

We have hitherto been told that the educational measure alone is calculated to do so much for us that it is worth trying for alone, subsequently going forward for what are regarded as less important matters. I cannot think, however, that piecemeal legislation is the kind to be of most benefit to us. It is like erecting a small building and adding thereto from time to time: it is never found to meet its intended purposes to the same extent as it would if built complete in the first instance. There is no probability of obtaining our every want, and we are liable to have something added which we would prefer to be without; therefore it is well to make reasonable requests as full as possible.

One anomalous position we hold is that, while we are the legally recognised compounders of medicine, any person can keep open shop for compounding so long as he does not dispense poisons.

I am far from supposing that in these days of free trade we can hope to monopolise the sale of every simple drug, but outside the rights reserved to the medical profession we ought certainly to do the whole of the dispensing. This state of things exists under the Irish Act, which is of more recent date than our own, and we can scarcely imagine that it is not admitted as a principle, but merely as "another injustice to Ireland." Next the stunted growth and premature decay of the Pharmaceutical Society clearly show that there is something wrong, some reason why it embraces but a small section of our body. The fact is admitted and remedies have long since been proposed, but up to the present none have been applied. The position seems difficult to realise. A voluntary society exercising legislative powers over double its own number of persons outside and unrepresented—persons who have a vested interest in a business which may be materially influenced by the action of this minority. We are led to ask, Has not the time come when this state of things should cease, and when every person who passes the qualifying examination should become a life member of the Society? This could easily be accomplished if the examination fees were so arranged that every candidate contributed a total sum of ten guineas for his examinations, the journal, if required, being supplied for a small subscription. At present it is supplied free to members and associates, and is valued by many at what it costs; but let it exist on its own merits, and it would be read and appreciated by all who subscribed to it. There should still be an honours examination, with a fellowship attached, and some other privileges might be added, whilst the fee could well be reduced. One fails to see even now why the fee to be paid for the voluntary examination (although not considerable) should be higher than the others.

The question, too, of exemption from jury service claims our attention, and, although it may require a little perseverance to accomplish our object, there should be no difficulty in showing the necessity of exemption for every man on the register. At present those who are least likely to be supplied with efficient help are most liable to be called on to leave their business for this public service.

Then the poison schedule wants both amending and enlarging. There is some uncertainty about the position of various



vermin-killers—as to whether they come under parts 1 or 2 of the schedule—and this should be made clear.

Ferrocyanide of potassium must, or ought to be, labelled “poison,” although it is not so; this could be remedied. And there are several poisons, such as carholic acid, which should be added.

Lastly, there is this word “person,” concerning which we ought definitely to know to whom it applies. There are, admittedly, advantages and disadvantages connected with both the old and new readings, and there are differences of opinion about them, but I think that all will admit that ambiguity should cease. I have in no way changed my opinion as to the intention of the 1868 Act; but if the new reading has to be accepted, let the vested interests of those men of mature years, experience, and ability, still unregistered, be duly recognised and provided for.

Passing from the legal surroundings of our art, this review will be imperfect if we do not look at the competition and the changes which have been introduced into the business by the increased demand for specialities. I have already stated my opinion that some of the grocer competition would have been prevented by the enforcement of the labelling clause. The subject is too wide for me to attempt, this evening, to argue whether those who have met this competition in part, entirely, or not at all, have been the wiser men. Certain is it that much of the business in patents, infants' foods, fancy soaps, and perfumery has left chemists for the draper, the grocer, and the stores. Were this all, it would perhaps not be so serious a matter; but when we find houses doing a large business in supplying these distributors with a great variety of drugs and preparations put up in an attractive style to sell at exceedingly low prices, and not always with the best regard to quality, we must certainly feel that our *bona fide* business is being assailed in a very serious manner. The large number of preparations and specialities from time to time introduced and advertised, more especially by our American brethren, has largely increased our vocabulary and our necessary stock, and has made it essential that we should be well posted in the nature, properties, and uses of many medicinal agents which but a few years ago were practically unknown.

These, with others from Germany, tax our knowledge of materia medica and our chemistry, more particularly in reference to coal-tar; they constitute an essential part of our business, and those who would keep pace with the times must be prepared to supply them when required. Pharmacy is a progressive art, of which we have good evidence in the tendency to render our galenical preparations more uniform and definite in strength.

There is slowly growing up around us a better knowledge of the nature of the drugs we deal with, better means for determining their active constituents, and of learning the most suitable menstrua for their extraction and of standardising the products. For many years the Conference has done useful work in this direction; and more recently the work of the research laboratory has helped to some extent; but in my opinion more rapid progress would be made if the Council of the Pharmaceutical Society would give practical pharmacy and materia medica a better position in their school. Nearly half a century ago there were at Bloomsbury Square distinct professors of chemistry, botany, materia medica, and pharmacy. To-day there are two professors of chemistry, one of botany, but none of the other two subjects. Truly there is teaching of these in an excellent manner so far as they are gone into; but there should be endowed chairs and more complete training given in both subjects and neither should have an inferior position to the other two. The final object of the teaching there or at any other schools of the kind, the object of our meeting here from time to time, of my remarks to-night and of any discussion thereon, should be the better practice of pharmacy.

**HYDROGEN PEROXIDE.**—According to G. Tammann, the spontaneous decomposition of hydrogen peroxide in alkaline solution is found to be independent of the amount or nature of the base which is present. It is probably caused by the presence of traces of metallic oxides, such as the oxide of iron, dissolved in the alkali, for he shows that the addition of small quantities of such oxides increases enormously the rate of decomposition.

## Legal Reports.

### THE APOTHECARIES ACT.—CAN HERBALISTS DISPENSE?

IN the Queen's Bench Division of the High Court of Justice, London, on Saturday last, the case of the Society of Apothecaries v. Welch came before Mr. Justice Cave and Mr. Justice A. L. Smith, sitting as a divisional court. This was an appeal by the defendant from a decision of the judge of the Birmingham County Court, and the society moved that the defendant might be ordered not to proceed with the appeal unless he gave security for costs. Mr. Houghton was counsel for the society in support of the motion, while Mr. Stanley Eardley was counsel for the defendant, and opposed it.

Mr. Houghton, in supporting the motion, said the action was brought in the Birmingham County Court by the Society of Apothecaries against the defendant for practising under the Apothecaries Act without being duly qualified or having any licence, and the judge gave judgment for the plaintiffs for 20*l.* and costs. The defendant had given notice of an appeal from that decision. On behalf of the Society of Apothecaries he (Mr. Houghton) now moved that the defendant should be ordered to give security for the costs, in the event of his not succeeding on the appeal. The grounds of the application were that the defendant had written a letter to the county court judge saying he had no means, and had told the solicitor to the Apothecaries' Society at Birmingham that he could only pay at the rate of half a crown a week, so that it would take him about five years to satisfy the judgment. The defendant had filed an affidavit that he had hitherto always paid his debts, and that if he was not allowed to appeal against this decision his business would be destroyed. In conclusion, Mr. Houghton asked their lordships to order that the defendant give such security for costs as the court considered reasonable.

Mr. Eardley, in opposing the application, said a very intricate and novel point under the Apothecaries Act, which had never been decided, was involved in this case—namely, whether herbalists could practise or dispense. The defendant practised as a herbalist at Birmingham, and he had a stamp licence which it was admitted allowed him to sell and recommend medicines prepared by himself or anyone else. The case raised quite a new point of law, and would affect a large number of practitioners throughout the country. The defendant had always paid his debts until this great and powerful society jumped upon him and saddled him with the costs of a lawsuit, and now they wanted to deprive him of his right to appeal. The claim was under the statute of Henry VIII.

Mr. Justice Cave: What was the amount of the verdict?

Mr. Eardley said it was a penalty of 20*l.* There was no option but to give that or nothing. The evidence was that this man had “herbalist” in his window, and he declared that he practised as a herbalist. The defendant gave notice on January 28 for an appeal to be made on February 5, and the plaintiffs took no action until eight days had elapsed, and then served him with notice of the present motion. There was a delay of eight days perfectly unexplained. The learned counsel contended that his client should not be ordered to give security. The informant in the case was a perfectly healthy man, who went to the defendant and told him a lot of lies in order to trap him.

Mr. Justice Cave: We need not trouble you further, Mr. Eardley.

Mr. Houghton: I suppose our delay is what presses upon your lordship's mind?

Mr. Justice Smith: Not with me.

Mr. Justice Cave: Not with me at all.

Mr. Houghton stated that the county court judge at Birmingham found that this practitioner endeavoured to get 5*l.* out of the patient, and said he would effect a cure for that sum.

Mr. Justice Cave in his judgment said he thought they ought not to compel this appellant to give security for the costs of the appeal. The case had been before the county court judge, who thought it was a case of some difficulty, and therefore had given the defendant leave to appeal. If



they were to compel this man to give security for costs on the ground that he had no means, then they would be taking away from him that appeal which the learned judge below thought not unreasonable that he should have.

Mr. Justice A. L. Smith concurred, and the motion was dismissed with costs.

#### ACTION FOR BROKEN CONTRACT.

In the Queen's Bench Division on Saturday last, before Mr. Justice Grantham, the case of *Crosbie v. Dobson* came on for hearing. Mr. R. O. B. Lane, Q.C., was counsel for the plaintiff, and Mr. Jackson appeared for defendant. The plaintiff sought to recover 70% damages in consequence of defendant having broken his contract to deliver 70 tons of muriate of ammonia, used for galvanising purposes. It was alleged for plaintiff that, Mr. Dobson having got behind in his deliveries, he was obliged to go into the market and buy against him. Since the making of the contract, however, the price of chemicals had gone up, with the result that for what he bought he had to pay 70% more than he would have done had he paid simply under his contract. The defendant, in his evidence, said there were no arrears in the deliveries of ammonia until the plaintiff got behind in sending payments. He had been in a position to send the whole amount under the contract, but for its breach, as he considered, by plaintiff in not paying "cash against invoice." Mr. Justice Grantham said that in the correspondence defendant had always been promising to send on the ammonia, and did not put an end to the contract on the ground that plaintiff, not having paid "cash against invoice," had broken it. That being so, he did not consider he could succeed on such a defence now; and he therefore considered plaintiff entitled to the amount he had claimed, less a sum which he had as discount from those he bought of in the market.

#### BANKRUPTCY REPORTS.

##### BANKRUPTCY OF A STOCKPORT CHEMIST.

MR. THOMAS HART, pharmaceutical chemist, 72 Lancashire Hill, Stockport, came up for public examination in bankruptcy at the Stockport Bankruptcy Court on Thursday, before Mr. H. D. F. Dobson, registrar. The debtor's filed statements showed liabilities amounting to 831*l.* 2*s.* 7*d.*, including preferential claims. The assets included machinery 100*l.*; stock-in-trade, 150*l.*; furniture, 30*l.*; and book debts, 23*l.* 9*d.* The whole was estimated to produce 183*l.* 9*d.*, leaving, after deducting preferential claims, 162*l.* 4*s.* 6*d.* to rank for dividend, and a deficiency of 648*l.* 1*s.* 10*d.* Questioned by the Official Receiver (Mr. A. C. Procter) the debtor said before he commenced business in 1880 he was indoor assistant to Messrs. Sims & Shaw, chemists, Stockport, at a salary of 60*l.* a year and his keep. He received 150*l.* from his wife, which came to her under the will of her father. He had two policies on his life, each of 100*l.* A great many proceedings had been taken against him, none of which he had defended. Twelve months ago he became aware he was insolvent, but thought he might recover ground if trade improved. He never took stock. Had had no sale of effects by bailiffs at the suit of either landlord or creditors. During the last three years his business had barely paid; the last twelve months it had not paid at all. His expenditure was 30*s.* a week, which he supposed came from what he owed creditors. He had received 34*l.* 6*s.* 3*d.*, a one-fourteenth share, from his grandfather's estate, and other trifling payments from the same source, amounting to an aggregate of about 20*l.* He and his brother were trustees under his late father's will. While his father was paralysed his brother looked after the estate, and gave him 200*l.* out of it, with which to start business. He had four children, the eldest being eight years of age. Had paid about 20*l.* to doctors for attending his family in sickness, and two doctors were scheduled as creditors. He had paid 12*l.* doctor's bills since Christmas by contra account. The profit on surgeons' goods was merely nominal. His assistant's wages were 52*l.* a year, and it was put in the deficiency account. The Official Receiver: Have you sold goods for what they cost you? No,

I have sold at a profit.—Well, has not the profit gone to pay the assistant's wages? Last year business was very bad, and the receipts very low.—Have the profits done more than pay the rent and taxes? I don't think they have.—Did you purchase goods from Messrs. Raimes & Co.? Yes, 39*l.* 4*s.* for Tonquin beans.—Did you know you were insolvent then? I was not aware of the amount.—What are these beans used for? In the manufacture of tobacco.—Did you purchase them in your business as a chemist? Yes.—Do you manufacture tobacco? [No, I sell them to Messrs. Robinson & Sons, tobacco manufacturers, Stockport.—They have paid you for them? Yes.—What did you sell them for? 42*l.*—Then you really made a profit of 3*l.*, and these people have proved? Yes.—Of course these beans are not bought by chemists in the ordinary way of business? No.

The debtor further explained that he countermanded the order for the beans, but Messrs. Raimes & Co. replied that they had already despatched the goods and could not take them back, although he offered to pay the carriage. Questioned by Mr. J. J. Sidebotham, solicitor, who appeared on his behalf, the debtor said he did fairly well in business at the commencement, but afterwards the stoppage and removal of works caused an exodus of people, many of whom were his customers. He also lost by a venture in teething powders, and the starting of another chemist's shop near further injured his trade. It was unusual for chemists to take stock, owing to the difficulty of doing so with any accuracy. He was with Messrs. Sims & Shaw five years, and during that time they did not take stock. When he became aware of his insolvency twelve months ago his wife borrowed 200*l.*, which he thought would put him right. He had been in difficulty before, but had always managed to make some arrangement. He knew he should not be pressed for the 200*l.*, and that was why he continued trading. Re-examined: He was liable for the 200*l.*, and had he been pressed for it his wife had not the means to repay it during her mother's lifetime. The examination was closed. It may be mentioned that one of the creditors has offered to assist Mr. Hart to the extent of 100*l.*

##### Re JOHN HENRY HEATH, 13 Streatly Road, Willesden, Chemist's Traveller.

A RECEIVING order was made against the estate of this bankrupt on January 21, and accounts have now been issued from the London Bankruptcy Court, showing gross liabilities 811*l.* 17*s.*, of which 781*l.* 17*s.* is unsecured, and assets "nil." The bankrupt states that he was formerly in business as a chemist, and in 1873 he filed a petition for liquidation, having liabilities 3,590*l.* and assets 368*l.* No dividend was paid under those proceedings, but he obtained a discharge therefrom. Since 1873 he has been employed as a traveller, and in 1877 was adjudged bankrupt, with liabilities 850*l.*, and no assets, when again no dividend was paid, but a discharge was obtained. He attributes his present failure to his expenses having exceeded income for several years past.—The first meeting of the creditors was held on Thursday before Mr. H. Brougham, an assistant receiver, when the bankrupt stated that he was unable to submit any offer. The creditors present decided not to appoint a special trustee, but to leave the matter with the Official Receiver, to be wound up in the usual manner by the Court. The public examination of the bankrupt will be held on February 27.

CLAASSEN has found in the leaves of *Cephalanthus occidentalis* a bitter principle, cephalanthin, and citric acid, but neither tartaric acid nor malic acid.

RICIN, according to Professor Kobert, of Dorpat, and H. Stillmark, one of his pupils, is an albuminous body, one of the so-called phytalbumoses, and belongs to the group of unorganised ferments. As obtained from the seeds of *Ricinus communis* it is a very poisonous substance, violently irritating, causing erosions and ulcerations of the mucous membrane of the gastro-intestinal tract when given either by the mouth or intravenously. These erosions are believed to be the result of coagulation of the blood and consequent thrombotic arrests of circulation in the intestinal capillaries. It would seem from the investigation that ricin occurs in castor oil more frequently now than formerly.



## Trade Notes.

MESSRS. PROSSER, TAYLOR & Co., of Brisbane, have obtained the contract for the supply of drugs, &c., to the Queensland Government.

MESSRS. B. HOOPER & Co. (of King William Street, E.C.) have transferred the wholesale portion of their business to 134 Upper Thames Street, E.C.

WE understand Mr. T. White, agent in Ireland for Messrs. C. R. Harker, Stagg & Morgan, 15 Laurence Pountney Lane, London, and Messrs. Ayrton & Saunders, 149 Duke Street, Liverpool, has changed his office from 14 St. Andrew Street to 17 Upper Fowness Street, Dublin.

MAGGI.—In the note in our last issue regarding the introduction of "Maggi" into this country, we referred to it as "new." We meant "new" in England, for as it happens the manufacturers, Julius Maggi & Co., of Kemptthal, Switzerland, established their business in 1835, and they claim that they are the oldest makers of extract of beef.

MESSRS. AYRTON & SAUNDERS are introducing a line of toilet and medicated soaps, the manufacture of Henri Frères. These include some novelties; for instance, a cold-cream and honey soap, a watercress toilet soap, a sulphur cream soap, a carbolic glycerine soap, a grey oatmeal soap, &c. They seem to answer very well to their titles, and are well-made and useful goods.

MESSRS. W. B. FORDHAM & SONS (LIMITED) have declared a dividend at the rate of  $12\frac{1}{2}$  per cent. per annum (tax free) for the second half of the year ending December 31, making 10 per cent. for the whole year, writing off the usual sums from premises account, plant, fixtures, &c., and carrying forward 1,721*l.* after writing 1,000*l.* off goodwill, and carrying 1,000*l.* to special reserve.

SEQUAH, LIMITED, send us a note from the town crier of Lynn, stating "that the paragraph in the paper called THE CHEMIST AND DRUGGIST of me crying about Sequah being an impostor is false. I did cry about the Sepoy's oil, but nothing about Sequah." This refers to a paragraph in our last issue, for which, as it evidently conveyed a wrong impression, we apologise hereby.

HENRY LAMPLOUGH (LIMITED).—The directors report a net profit of 1,452*l.* 16*s.* 8*d.* on the half year's trading, which, added to 4,608*l.* 4*s.* 6*d.* brought forward, enables them to declare a dividend at the rate of 10 per cent. per annum on the year's trading (absorbing 2,256*l.* 7*s.*), and to carry forward a balance of 3,804*l.* 14*s.* 2*d.* According to the accounts for the half year their Holborn shop returned gross profit 584*l.* 11*s.* 4*d.* for the half year, the expenses being 366*l.* 14*s.*; the Broad Street shop in the same period made 465*l.* 14*s.* 4*d.* gross profit, with expenses 306*l.* 18*s.* 6*d.* They have lately opened another branch shop at 42 Fenchurch Street.

THE CHARLES A. VOGELER Co. (the St. Jacobs oil people), of 45 Farringdon Road, send us a parcel of thirty-two different styles of counter-bills or wrapping paper recommending their speciality. These are in various sizes and styles, and are all more or less cleverly illustrated. We are pretty well hardened to medicine handbills, but we confess to have read some of these with much interest. The firm will supply these, with transparencies, show-cards, &c., to any chemist who will undertake to use them to mutual advantage, and they assure us that they had communications from over five hundred chemists in answer to their last page on this subject in this journal.

THE annual report of the Newcastle Chemical Works Company (Limited), which has just been published, shows a net profit of 7,049*l.* 8*s.* 6*d.*, out of which a dividend of 6 per cent. per annum will be paid to the holders of the preference shares, absorbing 3,600*l.* Raw materials (coals especially) and labour show a sharp advance, and the cost of manufacture of the company's products will be seriously enhanced during the course of the ensuing year. On the other hand, caustic soda shows an advance of about 30*s.* per ton as compared with the lowest price of last year. The plant for the recovery of sulphur will probably be put into operation early in May next, and the sale of sulphur ought

materially to influence the result of the company's operations. The cost of the erections will exceed the anticipations of the directors, and financial assistance was obtained from the late chairman upon the security of mortgage debentures. The sums so lent to the company amounted up to December 31 last to 54,000*l.* It is proposed to fill up the vacancy at the Board caused by the death of Mr. Christian Allhusen by the election of Mr. J. E. Davidson as managing director. Mr. Davidson, as one of the executors of the late Mr. Allhusen, and also as a considerable holder of shares in his own right, is largely interested in the company. He has been exclusively engaged in its business for the last 24 years, and during the last 12 years has acted as secretary and general manager of the commercial department. The salt works give satisfactory results. A well has recently been sunk upon another part of the royalty held by the company. A salt bed, 30 feet in thickness, was met with at a depth of 778 feet, being 312 feet nearer the surface than at the other portion of the royalty already proved by the company.

## Personalities.

MR. GEORGE CLARIDGE DRUCE, M.A., pharmaceutical chemist, Oxford, has been appointed sub-curator of the Fielding Herbarium, by the Fielding trustees, in succession to Dr. Selmar Schonland, M.A.

MR. F. O. GOLDING, chemist and druggist, Yoxford, Suffolk, has taken over the business until lately carried on by Mr. F. R. Rump at "The London Pharmacy" in that town.

MR C. KERNOT BUTT, writing to the *British Medical Journal*, as executor to the late Dr. Charles N. Kernot, the well-known proprietor of the business carried on under the title of Smith, Stanistreet & Co., of Calcutta, says that several frauds by means of begging-letters have lately been perpetrated on members of the medical profession in his name. The letters, which pretended to be signed by Dr. Kernot, represented him as having returned from India in ill health and in a destitute condition. These letters were presented by a woman passing as the wife of Dr. Kernot, and several handsome contributions were obtained. Fortunately Dr. Bourne, the Honorary Secretary to the Charity Organisation Society at Bristol, heard of the applications and, having known Dr. Kernot, knew that he was dead, after having amassed a large fortune in India. He pursued the case successfully, with the result that the impostors, who gave the name of Clark, have been sentenced to nine months' imprisonment with hard labour.

## Gazette.

### PARTNERSHIP DISSOLVED.

McEnery, Smith, and Webster, Cerne Abbas and Buckland Newton, physicians, surgeons, and accoucheurs; as far as regards J. Webster.

### THE BANKRUPTCY ACT, 1883.

#### RECEIVING ORDERS.

Lupton, James Irvine, Richmond, Surrey, veterinary surgeon.  
Ripley, George, Wortley, near Leeds, aerated water manufacturer.  
Vincent, William Albert, Aston-juxta-Birmingham and Birmingham, surgeon dentist.

#### ADJUDICATION.

Ripley, George, Wortley, near Leeds, aerated water manufacturer.

#### ORDERS MADE ON APPLICATION FOR DISCHARGE.

Mullings, Samuel Edward, formerly of Gower Street, W.C., Cintra Park, Upper Norwood, and Redhill, now of Crawley, surgeon, out of practice—discharge granted.  
Shackleton, Charles James (trading as Jesse Fisher & Son), Derby and Madeley, chemical manufacturer—discharge suspended for three years.



## POISONOUS PROPRIETARY MEDICINES AND THE PHARMACY ACT.

ON Thursday afternoon Mr. A. Braxton Hicks, the Mid-Surrey coroner, resumed his inquiry at the Town Hall, Wandsworth, into the circumstances attending the death of Herbert Charles Myring, aged 4 years, lately residing with his parents at 12 Lucerne Terrace, Earlsfield Road, Wandsworth, who died on the 13th ult.

The case is of considerable importance to vendors of patent medicines.

Ruth Myring, the mother, stated that the deceased was a delicate child, suffering from irritation of the brain and rickets. On the 12th ultimo he was seized with sickness, and on the following morning was very giddy and rolled his eyes about. Just before the doctor came witness picked up from underneath the dressing table an empty bottle, produced, and the deceased told her that he had been drinking some of the contents, adding that his sister had also taken some. Dr. Dodson told her to keep the child awake, but she was unable to do so, and he died at 8 P.M., without having recovered from his drowsiness. The bottle alluded to was labelled "Matthias's Compound Syrup of Camphor, or Cough Linctus," but she did not know whether it contained opium, laudanum, or morphia. Her son had brought the bottle home on January 11, and she put it on the mantelpiece, intending to use it for the family. She always kept bottles containing poisons in a cupboard, and if she had known there was any poison in this linctus, she would have put it away. She had no doubt the deceased drank nearly the whole of the contents of the bottle.

John Myring, the father, proved that he had been in the habit of taking the preparation in question, and that he did not know what it contained.

William Myring, son of the last witness, spoke to purchasing the bottle of linctus produced at the address mentioned on the label for 2s. 3d.

Dr. A. E. Dodson, who was called in, said that the child presented every symptom of narcotic poisoning, its general aspect being leaden. He applied the usual remedies, but without avail.

Mr. Charles Alfred Hibbert, demonstrator of anatomy at Westminster Hospital, who made a post-mortem examination, said that the stomach contained 3 oz. of a grey grumous material, which he sealed up, together with the contents of the bladder, &c. The immediate cause of death was asphyxia, consequent upon the condition of the lungs, and bronchitis. The 20th part of a grain of morphia was sufficient to kill a child, and this in a child suffering from bronchitis would diminish its chance of recovery.

Harry Cecil Mantashhead, assistant to Mr. John Jackson Matthias, a pharmaceutical chemist (registered), of 6 Railway Place, Fenchurch Street, E.C., identified the bottle produced by Mrs. Myring as having contained linctus. On January 15 Sergeant Moon purchased three bottles and marked them in his presence and sealed them up, taking two away and leaving one with witness. The cough linctus was composed of honey, tincture of tolu, tincture of cardamoms, squills, and morphia. Each bottle similar to the one produced contained 2 grains of morphia. It was sold as a patent medicine, and a stamp was on each bottle. If they labelled it "poison" people would not buy it.

Dr. Dodson, recalled, said in his opinion the fact of the child having vomited, and its general treatment, tended to keep it alive so long. In his opinion death was due to the condition of the lungs, following narcotic poisoning.

Dr. Thomas Stevenson, M.D., of Guy's Hospital, one of the official analysts to the Home Office, stated that he had analysed the contents of the bottles labelled cough linctus. Each fluid ounce contained 0.476 grain of the acetate of morphine, or nearly half a grain; and as each bottle contained approximately 4 oz., a bottleful would contain the equivalent of  $\frac{19}{10}$  grains, or nearly two grains. The fact that morphia was found in the urine showed that a large dose for a child had been taken and probably a fatal dose; and his failure to discover any trace of the poison in the stomach and other viscera led him to believe that the drug was taken some considerable time before death.

Mr. John Jackson Matthias, a registered pharmaceutical chemist, of 6 Railway Place, Fenchurch Street, said that he was the proprietor of the cough linctus referred to. He prepared it from a prescription which originally came from the Bristol Infirmary. He slightly modified it, however, by substituting morphia for syrup of opium. He did not label it "poison," as he did not consider it compulsory to do so.

The Coroner: What point do you take?

The Witness: That it is not customary. To-day I sold a bottle of Easton's syrup, and because I labelled it "poison" the people brought it back, saying they would not have it, as they could get it at Allen & Hanburys' without the label. Easton's syrup contained strychnine, which is far more potent than morphia.

The Coroner: Are not Messrs. Allen & Hanburys on the Council of the Pharmaceutical Society?

The Witness: They are.

The Coroner: I thought so.

The Witness: There is not sufficient morphia in my preparation to poison an adult person, even if he took a whole bottle. Two grains is not a poisonous dose.

Dr. Stevenson dissented, and said he had known two grains to kill an adult, and as a rule one grain would, but it was doubtful whether it was a fatal dose.

Mr. Matthias went on to argue that chlorodyne and Powell's halsam of aniseed were not labelled "poison," and said he would admit that he had not complied with the seventeenth section of the Pharmacy Act.

The Coroner said he thought that the preparations mentioned by Mr. Matthias should be labelled, and the public had a strong opinion on the point.

Mr. Matthias added that there were many medicines more potent than his which were not labelled.

The Coroner said he could only act with regard to matters that were before him. Did the witness call a medicine "patent" because it bore the Government stamp?

Mr. Matthias: Yes, that is one reason, and another is because it is a proprietary medicine.

By the Coroner: His linctus had not been patented.

This concluding the evidence, the Coroner proceeded to address the jury, remarking that their first duty was to ascertain the cause of the child's death. The facts were really undisputed, and showed that the child died after drinking what he held was improperly called a patent medicine; and he thought that having heard the evidence of two medical men, which had been confirmed by Dr. Stevenson, they would have no doubt in their minds but that the death was due to the action of a narcotic poison. How, then, did the child get the poison? He (the Coroner) wanted to point out to them a matter which seemed to him of particular importance, at all events to the public. After reading sections 15, 16, and 17 of the Pharmacy Act of 1863, the latter of which, he said, made it unlawful to sell any poison, whether by wholesale or retail, unless the bottle, vessel, wrapper, or cover in which such poison was contained be distinctly labelled with the name of the article and the word "Poison," and the name and address of the seller—a section which applied to this particular case, the preparation coming under part 2 of the schedule—he stated that the only caution on the bottle in question was in these words: "To be kept out of the reach of children, as it is sweet, and they might take too much." Not a word was said about its being a poison. He then read the preamble of the Act to show that the Act was designed for the safety of the public, and observed that it was owing to the fact that this bottle was not properly labelled that this unfortunate occurrence was brought about. This preparation had been called a patent medicine, but it seemed to him that "patent" was a word which was much misused. In the ordinary course it was the custom to look upon all proprietary medicines as patent medicines; it was a word which had been very loosely used, and was no doubt of great advantage to the dealers. The 16th section of the Act said that only registered chemists could sell poisons, so that a man not qualified had no right to sell poisons at all; but section 17 enacted that that should not apply to the making and dealing in patent medicines. That was a matter of considerable importance to the public. The term "patent medicine" should signify that it was protected by Royal Letters Patent granted under the Great Seal. The



Act of 1783 was the first Act which dealt with this class of medicine, distinguishing between the medicines protected by letters patent and those sold as specifics for curing certain diseases, and not sold by qualified chemists and druggists. That Act did not do much good, and another was passed later on. It should be remembered, too, that when the Pharmacy Act was passed there were patent medicines at that time. After contrasting patent medicines properly so called with proprietary medicines, the Coroner said that most of these were not patented because the proprietors would have to lodge specifications as to the ingredients of the article, and people would be able to get hold of the secret. Powell's balsam of aniseed was a secret he believed, and it was not patented for that very reason. Chlorodyne and kindred preparations were sold by grocers and others as patent medicines, but they were not such, and he thought the attention of the Legislature ought to be drawn to the fact that those medicines were being sold by unqualified persons. A qualified man was able to tell a person what an article was composed of and what it was for, and as a rule he put down the name of the purchaser of a poison. He would repeat that it was a misnomer to call these preparations patent medicines, and there was very good reason why they should be brought within the Pharmacy Act, which had never been obeyed, and for the safety and protection of the public it did seem to him that those in authority or the Legislature should see that these poisons were not sold broadcast in the manner they now were. Most of the other coroners took almost the same view of the matter, and they were constantly meeting with suicides and other cases of poisoning which would not have happened if the ordinary precautions of the Legislature had been carried out. In this case section 17 of the Act had not been complied with, and he had no doubt that this death would not have happened if Mr. Matthias had put "Poison" on the label. Referring to the sale of Easton's syrup by Messrs. Allen & Hanburys, as alleged by Mr. Matthias, without being labelled "Poison," the Coroner said it might be that he would have to draw the attention of some of the members of the Pharmaceutical Society to the fact that they were selling poisons without properly labelling them. But that did not affect Mr. Matthias, who had sold a medicine containing a fatal dose of morphia without labelling it "Poison," only relying upon the custom of the trade, and knowing that he ought to have labelled it. With regard to any further proceedings which he (the coroner) might direct, that would be a matter for him to consider eventually, but it was important that some check should be put on the sale of patent, or, rather, proprietary, medicines. The sale thus made was a breach of the Act of Parliament which was passed, as it stated, for the protection of the public. They could not deal with the question as a trade matter, but as it affected the public. It had been said, he knew, that if they carried out the terms of the Act as he suggested it would be inimical to the interests of the trade; but he thought that if the trade had read the Act of Parliament and carried out the spirit of the Act from the commencement they would have found that it would have been an enormous protection to them, and if they had thus looked after their own business it would have resulted in protection to the public, as they would have prevented unqualified persons from throwing broadcast over the land poisons such as chlorodyne, which, as they knew, was sold everywhere. And yet by law chemists monopolised the sale of poisons. If the Act was carried out in the spirit as well as in the letter, and was loyally acted upon by the chemists and druggists, who had the monopoly, they would not have the large number of misadventures, suicides, and murders they were constantly hearing of. He did not know what their opinion might be as far as the poison was concerned, but, if he was correct in the view he took of the law, he thought they would agree with him that the Act, if carried out properly, would be everything that was required, and would protect not only the trade, but also the public. They must express an opinion or not, just as they chose. Having ascertained the cause of death, they must decide whether it was a case of accident. It was a serious matter when a person neglected to carry out a statutory duty and death resulted from it, for it might be manslaughter. He did not think it would apply to this case, however.

Mr. Matthias (interposing): If the bottle had been labelled "Poison" it would not have prevented the death.

The Coroner: Yes, it would: the mother would have put it in the cupboard.

The jury returned a verdict of "Death from misadventure," and added a rider to the effect that all bottles containing poisons should be labelled "Poison." The foreman added that the jury desired to endorse everything the Coroner had said.

The Coroner intimated that he would consider whether he would place the matter before another tribunal, but it was very probable that he would take proceedings under the seventeenth section of the Act for improper labelling.

A gentleman, who said he was a personal friend of Mr. Matthias, said he knew for a fact that during the past 35 or 40 years a mixture similar to that sold by Mr. Matthias had been served out to the poor at Bristol, in cups, saucers, pickle-jars, &c. At the infirmary, which was also the hospital, they prepared as much as three or four hogs-heads at a time. They gave it away without any label or directions.

The Coroner said they might be prosecuted for manslaughter, for negligence, if somebody died.

### SOLUBLE ESSENCE OF GINGER.

By W. H. McGRATH.

SOME three years ago my attention was directed to this essence, and I commenced operations by an examination of the various soluble essences of ginger put forward by numerous makers, and although satisfied that there were some good individual points in most of the samples examined, yet there were but two which could be said to bear any approach to my idea of what a really good soluble essence of ginger ought to be.

In the outset I, therefore, laid down what I considered should be the governing points of my work:—

(1) That the "essence" should be as strong as possible compatible with its solubility.

(2) That it should possess the fine aroma peculiar to Jamaica ginger.

(3) That it should be perfectly free from capsicum. And now, after a long series of experiments, extending over a period of two years, I have at last succeeded in producing from the following formula a soluble essence of ginger quite equal to anything at present on the market:—

#### Working Formula.

Ginger, in coarse powder	..	..	..	1 lb. 8 oz.
S.V.R. (60 per cent.)	..	..	..	2 pints 5 oz.
Water	..	..	..	15 "
				3 pints

These are to be frequently shaken together for ten days, then percolated, pressed off, and filtered, yielding 45 fl. oz. This is "not to be made up" to 60 fl. oz., but worked from as it stands.

Take of the above tincture 40 fl. oz., water 40 fl. oz., and mix;  $\frac{3}{4}$  oz. phosphate of soda, dissolved in 5 oz. boiling water and allowed to cool, is next added, shaking the mixture;  $\frac{1}{4}$  oz. fused chloride of calcium dissolved in 5 oz. nearly cold water, and added; the whole to be again well shaken; allow to stand twelve hours, and filter.

Introduce the filtered solution into a still and distil off, at a very low temperature, 30 fl. oz. first, which put on one side in bottle for further use.

Distil then a further quantity of 40 fl. oz., and allow the still to cool.

The residue in the still, which will be about 18 fl. oz., is what we require. This must now be carefully got out by rinsing the still with the 30 oz. first drawn over. This takes up all that is essential. Filter once more through double-paper filter, and the product is 40 fl. oz. of a fine amber-coloured essence almost entirely soluble in water.

I trust the above will be found acceptable as a step towards elucidating that which hitherto seems to have been shrouded in a sort of mystery.

Laboratory of Messrs. Talbot & Co.,  
Gloucester.



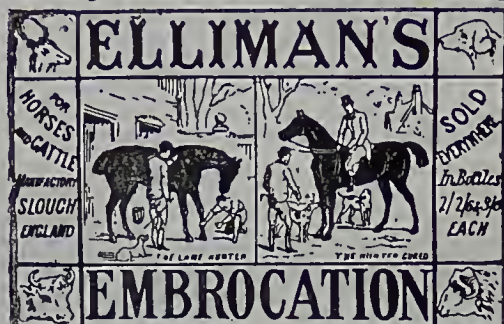
REGISTERED **"SANITAS"** TRADE MARK.  
IS THE IDEAL  
**DISINFECTANT,**  
And is most used in Antiseptic Surgery.

LARGEST SALE IN THE WORLD.

The Trade, in their own interest, should stock all our "Sanitas" Preparations.

**KINGZETT'S BACTERICIDES**  
AND  
PATENT PRESERVED PEROXIDE OF HYDROGEN  
**THE SANITAS CO., BETHNAL GREEN, E.**

SHOW CARDS, 24×17 or 17×12,  
Free to any Address in the United Kingdom.



See First Page, facing inside of front of Cover, in the first issue of the month for latest particulars.



**MOSS'S**  
**CASCARA**  
**BARK**—Fine selected quality, as used for making our  
**EXTRACTS**—Solid and Liquid, B.P. and Tasteless

Our preparations may be obtained through Wholesale Houses,  
or direct from

**JOHN MOSS & COY**  
Makers of Galenical and Medicinal Chemicals  
Galen Works, Wilson St., NEW CROSS ROAD, S.E.

**MEDICAL ELECTRICITY.**



EVERY DESCRIPTION OF  
Galvanic, Faradale, and Electro-Magnetic  
Machines and Electrodes, Galvano-Cautery and  
Lighting Instruments.

Lists free. Descriptive Catalogue, 100 illustrations,  
32 pages, 4 stamps.

**GENT & CO., LEICESTER.**

**FINEST POWDERED**  
**PURE FULLER'S EARTH**

In 56 lb. and 1 cwt. bags, 14s.;  
In 7, 14, and 28 lb. bags, 16s. per cwt., bags included.  
DELIVERED FREE IN LONDON. [1]  
**G. S. MUMFORD, FARRINGTON ROAD, E.C.**

**SILICATED CARBON**  
**FILTERS**



**PATENT SELF-AERATING**  
**MOVEABLE BLOCKS**  
**WORKS, BATTERSEA LONDON. S.W.**

**PROFITABLE ARTICLES. SALEABLE ARTICLES.**

For Burns, Wounds, and Abrasions.  
**LANO-CREOLIN, in Collapsible Tubes.**  
**CREOLIN GAUZE, 10 per cent.,**  
For use in Surgery.

*Creolin*

**CREOLIN DUSTING POWDER,**  
For Tender Skin and Wounds.

**SURGICAL & TOILET CREOLIN SOAPS,**  
Elegant, Effective, & Economical. For further particulars apply to  
**Jeyes' Sanitary Compounds Co., Ltd., 43 Cannon St., E.C.**

**EDITORIAL NOTES.**

**THE ILLEGAL PRACTICE OF**  
**MEDICINE.**

It is well known that the only Act of Parliament now in force, which limits the right to practise medicine to certain qualified persons, is the Apothecaries Act of 1815. By that statute it is made a penal offence for any one not in possession of the necessary diploma to act as an apothecary. The more modern medical Acts are framed on the principle of allowing any person to exercise the medical skill with which he may be, or thinks he is endowed, but prohibit the assumption of any title or description which might mislead the public into thinking the practitioner had been certified by any authorised body to be specially qualified. This, as the principle of legislation in regard to the practice of medicine, is what has been accepted by a Royal Commission appointed to consider the subject in 1882. That Commission said in their report that they considered it "undesirable to attempt to prevent unregistered persons from practising, but we think they should be prevented from representing themselves as being registered, or from assuming titles which would lead the public to believe that they are regular medical men." The bill brought into Parliament in pursuance of that Commission's recommendations would have consequently repealed the penal sections of the Apothecaries Act, relating to irregular practitioners, and we have no doubt that some day that object will be attained; that is, that any



one will be free to give or sell medical advice or surgical assistance so long as he or she lays no claim to the possession of any qualification not honestly acquired.

Meanwhile, some curious points have been raised for the defence in an Apothecaries Act prosecution which was begun at Birmingham in January last, and now awaits hearing in the form of an appeal in the High Court of Justice. Among other persons at Birmingham, the Society of Apothecaries instituted a prosecution against one William Welch, a herbalist of that city. A detective officer called upon Welch and consulted him with reference to certain alleged complaints, and was supplied with a bottle of medicine bearing a patent medicine stamp. For the defence, two Acts of Parliament were quoted. For one thing, it was said that the defendant was licensed under the Medical Stamp Act to sell the medicines which he supplied, and it seems to have been implied that that Act recognised, and thus to a certain extent sanctioned, the recommendation of those remedies for particular complaints. The other Act relied upon was a very curious and very old one, which, however, it is admitted has never been repealed. It was passed in the 34th year of the reign of King Henry VIII. It is so quaint and in some respects so just that we quote it entire. It is entitled "An Act that persons, being no common Surgeons, may administer outward medicines," and runs as follows:

Where in the Parliament holden at *Westminster* in the third Year of the King's most gracious Reign, amongst other Things, for the avoiding of Sorceries, Witchcrafts, and other Inconveniencies, it was enacted, that no Person within the City of *London*, nor within Seven Miles of the same, should take upon him to exercise and occupy as Physician or Surgeon, except he be first examined, approved, and admitted by the Bishop of *London* and other, under and upon certain Pains and Penalties in the same Act mentioned: Sithence the making of which said Act, the Company and Fellowship of Surgeons of *London*, minding only their own Lucres, and nothing the Profit or Ease of the Diseased or Patient, have sued, troubled, and vexed divers honest Persons, as well Men as Women, whom God hath endued with the Knowledge of the Nature, Kind, and Operation of certain Herbs, Roots, and Waters, and the using and ministering of them to such as been pained with customable Diseases, as Women's Breasts being sore, a Pin and a Web in the Eye, Uncomes of Hands, Burnings, Scaldings, sore Months, the Stone, Stangury, Saucelim, and Morpew, and such other like Diseases; and yet the said Persons have not taken anything for their Pains or Cunning, but have ministered the same to poor People only for Neighbourhood and God's Sake, and of Pity and Charity: And it is now well known that the Surgeons admitted will do no Cure to any Person but where they shall know to be rewarded with a greater Sum or Reward than the Cure extendeth unto; for in case they would minister their Cunning unto sore People unrewarded, there should not so many rot and perish to Death for Lack or Help of Surgery as daily do; but the greatest Part of Surgeons admitted been much more to be blamed than those Persons that they troubled, for although the most Part of the Persons of the said Craft of Surgeons have small Cunning yet they will take great Sums of Money, and do little therefore, and by Reason thereof they do oftentimes impair and hurt their Patients, rather than do them good. In consideration whereof, and for the Ease, Comfort, Succour, Help, Relief, and Health of the King's poor Subjects, Inhabitants of this Realm, now pained or diseased, or that hereafter shall be pained or diseased: Be it ordained, established, and enacted, by Authority of this present Parliament, That at all Time from henceforth it shall be lawful to every Person being the King's subject, having Knowledge and Experience of the Nature of Herbs, Roots, and Waters, or of the Operation of the same, by Speculation or Practice, within any Part of the Realm of *England*, or within any other the King's Dominions, to practise, use, and minister in and to any outward Sore, Uncome Wound, Apostemations, outward Swelling or Disease, any Herb or Herbs, Ointments, Baths, Pultess, and Emplaisters, according to their Cunning, Experience, and Knowledge in any of the Diseases, Sores, and Maladies be-

foresaid, and all other like to the same, or Drinks for the Stone, Strangury, or Agues, without Suit, Vexation, Trouble, Penalty, or Loss of their Goods; the foresaid Statute in the foresaid Third Year of the King's most gracious Reign, or any other Act, Ordinance, or Statutes to the contrary heretofore made in anywise, notwithstanding.

The County Court judge at Birmingham did not admit the relevancy of either Act. The Stamp Acts, he said, speaking broadly, cover only those cases where the patient treats himself, relying on his own judgment, not those where the treatment and medicine are prescribed by the person dispensing the medicine. The other statute, he said, clearly relates only to the treatment of what would now be called minor surgical cases; the case before him was, he was convinced, far outside its scope. His decision has been appealed against, and, as will be seen from our legal report, the judges in the High Court have taken care that that appeal shall be operative, whatever may be the financial means of the appellant. The argument is likely to be an interesting one.

### MR. HOWARD ON THE PROPOSED RAILWAY RATES.

WHEN the Board of Trade Commissioners had Mr. David Howard before them last Saturday they got the fullest statement of the chemists and druggists' grievances against the railway companies which has yet been submitted. It must be admitted, however, that his chief points were details a little outside the scope of the inquiry now being held. Mr. Howard finds fault with the regulations for the carriage of dangerous chemicals, such as ether, benzine, &c., and says that the difficulties put in the way of the carriage of these articles induces a system of smuggling them, which is practically winked at by the companies. He calls attention to the confusion between drugs and drysalteries, the former (in hampers) being relegated (in the companies' proposals) to the fifth class, the latter to the fourth class, though the only method to distinguish between them seems to be to have regard to whether they are consigned by a man calling himself a druggist or by one calling himself a drysalter. Facilities for the engagement of truck-loads, and a fair allowance for private cartage, are other points put forward by Mr. Howard. We confess, however, in these respects Mr. Howard's demands and the railway companies' conditions do not seem to be fit subjects for national investigation. The railway companies can have no desire to drive away trade, and it would be curious if they and their customers could not adjust their relative positions satisfactorily in fair conference. But in one of his answers in cross-examination Mr. Howard put his finger on the pivot of the controversy. He says in effect, truly enough, that the traders expected that by the Act which has authorised this inquiry they were going to get a definition of rates which should be at once referable and reasonable. Now they find that if the rates set down are enforced, trade is to be simply squashed; if they are not to be enforced, what is the good of them? We have been pointing out this dilemma ever since the inquiry was started, and it is one which admits of no solution. Everyone recognises that the railways must have a considerable margin, and Mr. Howard agrees that they have had enough hitherto to crush out trade if they had been so minded. The practical points are whether a referable and reasonable tariff can be established by Act of Parliament; if it can, to indicate how; if it cannot, to ascertain the use of this costly commission to anybody except the lawyers engaged on it.



## MUMMIFIED CATS.

A FEW days ago the steamers *Pharos* and *Thebes* arrived at Liverpool from Alexandria with a consignment of about twenty tons of mummified cats, addressed to Messrs. Levington & Co., of Liverpool, by a firm in Alexandria, who had purchased them from farmers and others in the neighbourhood of Beni Hassan, about 100 miles from Cairo. There had been a tradition for generations of the existence of an extensive cats' cemetery on the eastern bank of the Nile, above Cairo, but the exact locality remained a secret until a few months ago, when an Egyptian farm-labourer at Beni Hassan accidentally tumbled down a hole and alighted in what proved to be an extensive cats' cemetery, dating, according to the curator of the Liverpool Museum, from about 2000 B.C. At that time, as everyone knows, cats were held in extraordinary reverence in Egypt, and classed by the inhabitants of that country among the many animals which they believed to be more or less sacred. After death they were embalmed and reverently buried, and many of us have admired in the British Museum, or other places where Egyptian curiosities are preserved, the admirable manner in which the linen surrounding the embalmed corpse has been enveloped round it, forming a regular design like fancy basket-work, with the edges carefully turned inside, and often adorned with beautiful coloured decorations. The cemetery thus accidentally discovered proved to be an extensive one, containing many thousands of cats, all neatly laid out in rows, and the consignment now received in Liverpool is alone said to have numbered over 180,000, the average weight of each animal thus being about four ounces. The whole parcel, with the exception of a few museum specimens, was sold by public auction at Liverpool to a local dealer in artificial manure, who secured the cats at the rate of 73s. 9d. per ton, amid jocular observations on the part of his competitors and of the auctioneer, who employed one of the cats' heads by way of a hammer.

It would be a matter of some interest to inquire whether mummified cats would be acceptable to foreign wholesale druggists to replace the "Egyptian mummy," which until quite recently formed a regular article of trade abroad, "*Mumia Egyptiaca*" being a common heading in the price-lists of drug houses in Germany and some other Continental countries. In some parts of Germany there is still a sporadic demand for mummy for medicinal purposes, but as such its use is very much on the wane, though there would be still a good sale for the "drug" as an ingredient for certain pigments. The medicinal efficacy ascribed to the mummies was probably due to the asphaltum found in the bodies, and which was simply an ingredient used largely in the process of embalming. These bituminous ingredients are also the *raison d'être* of the demand which exists for the article among manufacturers of paints. So far as we can trace, however, the last important consignment of Egyptian mummies was received in Germany as long ago as 1876. This parcel was described in the price-lists of the period as of "good genuine quality," and was quickly absorbed by the trade. Even at that time the exportation of mummies from Egypt, at any rate for vulgar purposes, had to be carried on clandestinely, as the Egyptian Government had issued an order prohibiting their collection and sale. Later on these regulations were made more stringent, and since the British occupation the spoliation of the ancient tombs has been effectually stopped, the excavations having all been placed under Government supervision. Mummies found intact are transferred to the Government museum, while disjointed remains, or "pickings," to employ the expressive drug-trade term, are reverently covered up again. But the

protection thus extended to human remains does not appear to apply to the remnants of the lower animals, sacred though they may have been to the precursors of the motley race now inhabiting the Nile Valley. At the price reported to have been paid for the cats the transaction ought to prove a pretty profitable one to the importers, always assuming that the cat-manure, so far as nitrogenous matter is concerned, is comparable to nitrate of soda, of which the poorest agricultural quality is now quoted at 8*l.* 5*s.* per ton, and sulphate of ammonia, which is worth from 11*l.* 15*s.* to 12*l.* per ton. As it is very probable that asphaltum was employed in the embalming of cats as well as of human beings, and the Continental consumers of the article usually take their mummy powdered, it might perhaps be worth the consignees' while to turn their attention to this field, which, if small, seems not without promise. It is sad to think that even medicinal mummy has been very liable to adulteration, a mixture of 100 parts of asphaltum, 40 of olibanum, 10 of aloes, 20 each of colophonium and fir resin, and 20 of red ochre, powdered and melted together, being generally palmed off upon the unsophisticated purchaser in place of the real article. The average mummy of recent German commerce, therefore, was usually a hollow fraud, but, when mixed with a few odd pieces of old linen and a few traces of charred bones, the mystification seems to have been generally successful.

## COMMENTARY.

THE PHARMACY BILL.—Our correspondent Mr. Freshfield Reynolds emphasises the provision contained in the 6th clause of the new Pharmacy Bill, the importance of which we pointed out last week. It was hardly necessary for Mr. Schacht to ask the President how he would interpret the first sentence of the clause. It is as plain as words can make it, and if it were to pass into law Mr. Carteigh's opinion on it would be no authority. It says "it shall be unlawful for any person to compound, or to keep open shop for compounding, medical prescriptions unless he be," &c.; and the 7th section prescribes a penalty of 5*l.* in case of infringement. If the analogous sentence, "to sell, or keep open shop for selling," shall be held to hit the actual seller, so must this phrase hit the actual compounder. And there is less chance of getting round this one than the other. It has been held, and reasonably, that if a qualified person superintends the sale, an unqualified assistant may carry out the actual manipulation of it; but this could not apply to compounding, because the act of compounding is the manipulation. If chemists, therefore, support the proposed Bill, let them do so with a clear apprehension of the condition of things they are asking for, a condition which Mr. Reynolds puts plainly.

CAFFEINE TRI-IODIDE is the most recent new remedy, and has been introduced at the suggestion of Dr. Mortimer Granville, who states that it is an admirable combination of iodine for medical purposes. It breaks up quickly in the stomach, and the iodine acts freely without the depressing action which it has in the potassium and sodium salts, or even when combined with quinine. Apart from this, the tri-iodide of caffeine is a compound of considerable chemical interest. It was accidentally discovered by Professor Tilden when he was acting as demonstrator at the School of Pharmacy, and was the basis of several valuable papers on organic periodides communicated to the Chemical Society. The salt is formed by dissolving caffeine in weak alcohol and acidulating the solution strongly with hydriodic acid. In a day or two, especially when exposed to light, the solution de-



posits long prismatic crystals of the tri-iodide, the crystals having a green colour with a beautiful iridescence. The formula of the salt is  $3(C_8H_{10}N_4O_2I_3) \cdot 3H_2O$ . It is readily decomposed, and for that reason must be washed carefully with weak spirit, slightly acidulated with hydriodic acid. It forms a brown solution with rectified spirit. Like Hera-path's sulphate of iodo-quinine, it polarises light, and in other respects has similar physical properties to that compound.

**ESTIMATION OF ARSENIC ACID.**—Last week we gave a report of a paper read to the Manchester section of the Society of Chemical Industry by Mr. William Younger on the reduction of arsenic acid by potassium iodide. Mr. Younger has come about ten years too late, as Mr. W. A. H. Naylor, in a paper communicated to the Pharmaceutical Society in December, 1879, showed that the reduction of arsenic acid by hydriodic acid formed the basis for an accurate method of estimating the arsenical compound. It is, in fact, remarkable how closely both gentlemen agree in regard to details.

**THE MEDICAL VIEW.**—The *Lancet*, in reproducing from our columns the particulars of the cases of inaccurate dispensing in Yorkshire, says that "the publication of this list is not intended to set chemists upon their guard, but to indicate to the medical profession that chemical accuracy cannot in some districts be ensured by the prescription of the simplest remedies."

**CHLOROFORM AND ETHER.**—Dr. Roger Williams, of St. Bartholomew's Hospital, has gone into the hospital books for the last ten years, and finds that chloroform was administered 12,368 times, with fatal results in ten cases—being about one in 1,236. Ether was used during the same period in 14,581 instances, but with three deaths only. These facts bear out the growing opinion in medical circles of the greater safety of ether.

**FOREIGN QUININE IN THE UNITED STATES.**—An unusually crowded meeting of the Philadelphia Drug Exchange took place a couple of weeks ago. The reason for the excitement was the discussion of revenue and tariff questions as affecting the drug trade, with a view to influence the action of the Committee of the United States House of Representatives, which is now considering the advisability of effecting alterations in the American Customs tariff. Messrs. Powers & Weightman, the chemical manufacturers, and the only American house, we believe, who are still engaged in the manufacture of quinine, presented a memorial advocating the reimposition of a Customs duty on quinine and other cinchona salts, and the reduction or total abolition of the tax of 90c. per gallon now payable on alcohol for industrial purposes. The memorial, after a discussion in which the Protectionists seem to have had the field all to themselves, was adopted without a division, and it was resolved to petition the Legislature accordingly.

**SHOP HOURS.**—The Shop Hours League have drafted a Bill which will be submitted to Parliament, the purpose of which is to limit by law the hours of service in shops for all assistants, adults as well as young persons. It will provide that "No assistant or other person (other than members of the shopkeeper's family) shall be employed in, about, or in connection with any shop on week-days for longer periods than (a) fourteen hours one day of the week, between 8 A.M. and 10 P.M.; (b) twelve hours on four days of the week, between 8 A.M. and 8 P.M.; and (c) six hours on one day of the week, between 8 A.M. and 2 P.M." These periods are to include meal-times, and shall not in the aggregate exceed

sixty-eight hours' employment per week for each assistant. Every shopkeeper shall upon demand made, when any assistant leaves his employment, give the assistant in writing "a true description of his conduct, ability, truthfulness, and honesty." Then each shopkeeper is required to exhibit a copy of the Act in a conspicuous part of his shop, so that it may be seen by the public, and, further, he is required to keep a time-book containing "a true record of the hours at which every assistant in his employment begins and finishes his work." This book shall, upon demand, be shown by the shopkeeper to any local chief-constable, superintendent, or inspector of police, or to his shop assistant, between 8 A.M. and 8 P.M., providing that not more than one request per month be made. Penalties for contraventions of the provisions of the Act are 40s. and 20s. respectively, the latter to be imposed where a true character is not given, the Act duly exhibited in the shop, or the time-book is not kept and shown as directed. The penalties are to be recoverable in the same way as those inflicted under the Factory and Workshop Act, 1878. The Act is to apply to Scotland and Ireland. The law is to be duly enforced in England and Ireland by the chief officer of the police, and in Scotland by the Procurator Fiscal. Clause 10 enacts that "any justice of the peace or stipendiary magistrate having jurisdiction in the place or district in which it is alleged any offence under this Act has been committed shall grant a summons against any employer who has violated any of the provisions of this Act, at the request of any person who can establish a *prima facie* case." A "shopkeeper" is defined as "any person who occupies any building, or any portion of a building, for the sale of any goods by retail," and includes the business of a barber, but does not include keepers of refreshment houses. Finally, the Act is to come into operation on January 1, 1891.

#### PROFESSOR CHARTERIS ON SALICYLIC ACID.

AT the meeting of the Royal Medical and Chirurgical Society on Tuesday evening a paper was read by Dr. M. Charteris, of Glasgow, on "Rheumatism, its Treatment Past and Present," with special reference to recent experimental research on salicylic acids and their salts. We are indebted to the editors of the *Lancet* for a copy of their report, from which it appears that the author commenced by giving a general *résumé* of the treatment of rheumatism previous to the introduction of salicin and salicylic acid. First came the alkaline treatment, next the blistering of joints, then the expectant method; then followed a period of chaos, and, finally, salicin and salicylic acid were introduced. Details of an experimental research as to the action of salicin, salicylic acids, and their salts of sodium were given. It was found that salicin in doses of 30 grains, salicylic acid (natural) in doses of 10 grains, and salicylate of sodium (natural) in doses of 32 grains had no deleterious action on rabbits weighing two pounds and a half; but the artificial salicylic acid in doses of 10 grains, and artificial salicylate of sodium in ordinary use in doses of 18 grains, caused the death of rabbits of the same weight. On July 4, 1889, an impurity was discovered in artificial acid which was very soluble, and had an appearance like coarse flour. It had not yet been identified, but was probably derived from cresotic acid. One grain of this impurity proved fatal to a rabbit weighing two pounds. As the result of a further research it was found that the impurity could be removed by the following process:—Salicylate of calcium was first prepared, then decomposed by hydrochloric acid, setting free salicylic acid, which was subsequently purified by recrystallisation. The appearance of the purified acid was in every respect similar to that of the natural variety. The physiological action of this purified acid in 15-grain doses on rabbits was detailed. There was no paralysis, not even depression, after the last injection, and the rabbit was able to run



easily. He contrasted this physiological action with that of the best samples of artificial acid obtained from Messrs. Schering, of Berlin, which, in similar doses, proved fatal to one rabbit, and in two others caused marked prostration and paralysis, but not death. The paper concluded with practical deductions drawn from these investigations.

In the discussion which followed Dr. T. J. MacLagan, the introducer of salicin, spoke in favour of that drug. Sir Dyce Duckworth said that he had largely used the commercial pure sodium salicylate in hospital practice, but he could scarcely recall an untoward result. He thought that the price of the purer drug when used holdly would be considerable. He was in the habit of prescribing 20 grains of Schering's salicylate every six hours, the second dose being given at a three hours' interval after the first. Dr. Luff referred to the method of preparing artificial salicylic acid, and showed how harmful isomers might arise. Dr. Shaw believed that the artificial salicylate of sodium had a much greater efficacy than the natural salt. He had seen delirium, hæmorrhage, and tinnitus aurium occur with salicin, as well as with salicylic acid. Drs. A. Garrod, Myers, Taylor, Little, and Mitchell Bruce also spoke, but had nothing serious to say against the artificial acid. Dr. Lauder Brunton followed. He said the quality of the carbolic acid used was probably the great source of danger, for from impure carbolic acid oxytoluic acid and other substances of that order might come. The German patent for the manufacture of the acid had now expired, and it would probably now be made in this country. The Pharmacopœia committee could then specify a proper method for its manufacture.

Dr. Charteris, in reply, said he had failed to obtain a pure salicylic acid in the market. The dialysed acid said to be pure proved equally fatal to rabbits. It was not a sufficient description to specify the melting-point, but the characters of the crystals should likewise be defined.

The effect of Professor Charteris's communication is to show that the dialysed salicylic acid and its sodium salt cannot be regarded as physiologically pure. But it is possible that the artificial acid may be purified, so that it will equal the natural in all respects. Owing to the mention in the report of one of the largest manufacturers, we have seen Messrs. A. & M. Zimmermann regarding the matter, and they tell us they have been in communication with Schering's (Limited), and the Messrs. Schering authorise them to state that they have gladly fallen in with Dr. Charteris's suggestion, and are now manufacturing a physiologically pure artificial acid and its salts, answering all the characteristics of the purest natural. They expect a supply shortly, and will name a trade price at the earliest date.

## PHARMACEUTICAL STORY OF TO-DAY.

### A CHEMIST'S ASSISTANT COMES INTO 30,000%. A YEAR.

ONE day last week a tall, foreign-looking gentleman dropped into our sub-editorial room, and selecting the most unsophisticated-looking individual therein, introduced himself by handing over the following letter, which he said he had got in reply to an advertisement:—

D Sir

Birmingham  
nov 18th

I hire public Halls for 2 to 3 weeks at a time for the sale of medicine if you can speak for about 15 or 30 minnets on complaint I will hire you, say what saler you require. there is genearl from 1,000 to 2,000 people in the hall every night. say wheathe you can dran teeth. (But it is not nesaree you shoud draw teeth) shoud I not hear from you durin the next few days will take no notice of your letter. send photo to be retuned

H. W.—

The epistle was not a gem of business correspondence. It was written on a sheet of paper torn from an exercise book, and a blacklead pencil served the scribe for a pen.

"I suppose you didn't take the place?" said our interviewer to his visitor. "Oh! no," was the reply; "I was out of a situation at the time, but I could not have taken that place. But I'm not to be a chemist's assistant any longer." [This in a tone of truculent triumph, which somewhat belied

the solemn aspect of the visitor and his half-mourning attire.] "I have come into a fortune of 30,000%. a year."

"Thirty-thousand pounds a year! A chemist's assistant with 30,000%. a year! Bless me, you mean a lump sum of 30,000%.?" But no, it was 30,000%. a year, and would be a million and a half in the course of a year or two, for it was mostly in South African diamond fields. How it all happened was in this way:—A friend of his in St. John's Wood—a gentleman friend—had him out to his house one day, and they began, starting with a little "Scotch" at a neighbouring hostelry, to spend a happy day—a most happy day, which finished up at Kew. There was mutual attraction and firm friendship between them; but, alas! a week elapsed thereafter when neither saw the other. But at last our visitor called upon his friend, the gentleman who had his money invested in South African diamond fields, in Guinness, in Aërated Bread, and other "good things, you know," to find him in a serious mood, reflecting that kith and kin had he not to whom he could will his fortune. A week's meditation had brought the decision to him that he should give it all to his friend that chemist's assistant, and so it was to be: straight away without the formalities of death, will and probate.

Such was our visitor's story. It struck our interviewer that this case quite eclipsed that of the retired French assistant whom we had occasion to mention in our columns some time ago, and perhaps it was this connection that induced the inquiry, "Are you a Frenchman?" No, he wasn't; he came a little further north, and he spoke eight languages. He had been in quite a large number of London shops, the names of which he gave, but he was done with them all now.

"I don't know what to do with it all; 30,000%. is a great deal to spend in one year. I am going to see about the new house I have taken in Belgravia. Ten rooms, 80%. of taxes, a splendid house; handsome, grand!" Our interviewer was not so anxious about his visitor's future, so he changed the subject to pharmacy. Yes, the new Cresus knew Bloomsbury Square well—had been there several times, quite the Biblical number of times, but did not get his Minor certificate. It was Cart ighé that prevented him. They did not like each other, although he had spent 300%. a year for three years in being coached. They would not get any more of his money—i.e., Bloomsbury Square.

Such a friend has the Society lost. A man who has 30,000%. a year! Enough that to put it on its legs again.

"I would still like THE CHEMIST AND DRUGGIST. Send it to — Street, Belgrave Square. I'll send on a cheque to-night. Say "Bon jour" to the gentleman, dear." [This to a pretty little girl who was with our visitor.] "Only eight, and speaks five languages." "Good moruing."

### THE SEQUEL

to the incidents mentioned above appeared in the evening papers on Friday, February 8, under police intelligence, in the following paragraph:—

THINKS HE IS A PRINCE—James William Koster, a chemist, Charlwood Street, Belgrave Square, was found singing in a foreign language, and he told a policeman that he was worth a million and a quarter of money. At Westminster Police Court his sister-in-law said he had a delusion that he was a prince and was very rich, and had a mania for music and dancing. Mr. Sheil: If I let him go, is there anyone to take care of him? Defendant: My wife will, certainly. There is a carriage and eight horses waiting for me outside. Mr. Sheil: Take him to the workhouse; he will be properly cared for there.

CINCHONA ALKALOIDS AND CHLOROFORM.—According to Hesse, sulphate of quinine is soluble to the extent of 1 in 100,0 of chloroform. Cinchonidine sulphate has the same solubility, but quinidine sulphate is soluble to the extent of 1 in 195, and cinchonine sulphate 1 in 60 of chloroform. Recent experiments by E. Hirschsohn, recorded in *Phar. Zeit. fur Russland* (January 7, 1890), show that the addition of petroleum ether (sp. gr. 0.680) greatly increases the solubility. Thus quinine sulphate is soluble to the extent of at least 1 in 25 of chloroform, to which 30 per cent. of petroleum ether has been added. The other alkaloidal salts show variable behaviour in this respect.



## FRENCH PHARMACEUTICAL NEWS.

*(From our Paris Correspondent.)*

THE PHARMACY BILL was, on February 6, called up by the committee, and, on the motion of Deputy Lockroy, decided by the Chamber to deserve favourable consideration.

**DISTINCTION TO A NAVY PHARMACIST.**—On February 5 the Minister of the Navy, acting upon the advice of the navy superior council of health, awarded to pharmacist of the first class Lalande the prize of naval medicine, and an honourable mention to Dr. Le Dantec, a navy physician of the first class.

**A SLEEPING TRAP TO CATCH BURGLARS.**—A clerk in the navy department, last Friday, on coming home after the theatre to his villa at Bois-Colombes, found a stranger sound asleep on the sofa, with money, jewellery, and burglars' tools scattered about him. The intruder only awoke several hours later, in the police station, where he confessed that, feeling thirsty after breaking open a number of drawers and closets, he refreshed himself with some nice tasting stuff he found in a bottle. Soon after he got so dizzy and sleepy that he had to lie down, and lost consciousness. The bottle in question contained an opiate, prepared for a fastidious patient with the skill peculiar to Paris pharmacists.

**CARBON FLUORIDES.**—While fluorine to a certain extent chemically resembles chlorine, it is in some respects much like oxygen, the chief difference being that its affinities are far more powerful. At the Academy of Sciences sitting of February 10, M. Moissan presented a note on some further experiments of his on the newly isolated element. Most forms of carbon, diamond excepted, he found will readily ignite in fluorine at ordinary temperatures, and form two carbon fluorides corresponding to carbonic acid and carbonic oxide. At the same meeting, curiously enough, two other chemists were mentioned by M. Berthelot and M. Friedel as just having reached the same discovery through a different method—namely, double decomposition. The classic process of acting upon a silver salt with a chlorine combination—this time silver fluoride and carbon chlorides—was successfully employed for the purpose by both M. Guntz and M. Chabrier, the two chemists alluded to.

**THE DISPENSING OF POISONOUS ANTISEPTICS.**—An interesting discussion took place last week at the Academy of Medicine, respecting the propriety of allowing certificated midwives to freely use and order certain antiseptics, and pharmacists to honour such orders. The subject was brought up before the Academy by the Minister of the Interior officially requesting its advice on the proposed departure from the pharmacy law. A committee composed of Drs. Bourgoin (a pharmacist), Guéniot, Budin, Brouardel, Nocard, and Tarnier, reported in favour of granting to qualified midwives more facilities in obtaining antiseptics. But, to avoid all vagueness that might lead to abuse and mistakes, they recommended that pharmacists be authorised to dispense to midwives, on their own order, two sorts of antiseptics only. First, sublimate powders composed as follows:—

	Gramme
Mercuric chloride .. ..	0.25
Tartaric acid .. ..	1.00
Bordeaux red .. ..	0.001

Each paper to bear the regulation orange-red label, with the inscription, "Sublimé, 25 centigrammes. Pour un litre d'eau. TOXIQUE." Next, midwives might also be supplied by pharmacists with sublimate vaseline (1-1,000) for their hands and instruments, in quantities not exceeding one ounce at a time. During the discussion following the report presented by Dr. Budin, on behalf of the committee, M. Jungfleisch, of the section of pharmacy, justly disapproved of the Bordeaux red as a colouring matter. The dye, he remarked, owes its name to its resemblance to ordinary claret, and consequently the solution risks being mistaken for the popular beverage. A green or blue would be preferable. Dr. Budin replied that blues and greens are apt to leave stains; besides, one milligramme to the litre affords but a faint pink colouration and what is left of the solution will be thrown away by the attendants. "Then," retorted a pharmacist member, "the solution will look like dilute carbollic acid and other solutions

used in hospitals." It must be confessed that the medical members showed their unfamiliarity with the handling of poisons when stating their belief that no remnant of the stuff will lie about the cupboards, and expecting just one milligramme and no more of colouring in the powder. The same inexperience appears in the choice of the learned word "Toxique" for the label. Being meant for the people, it should bear the popular word, "Poison." The further consideration of the report was postponed to the following meeting.—On Tuesday, February 11, the discussion being resumed, the pharmaceutical members of the Academy succeeded in setting their colleagues right. M. Marty having remarked that there are unobjectionable blue colours, and M. Colin that the word "Toxique" is not only unintelligible to many, but also mistaken occasionally for "Tonique," the committee accepted their suggestions, and requested M. Marty to join them in devising a suitable colour for the antiseptic; after which the committee's report and conclusions were adopted, the word "Poison" being substituted for "Toxique," and the colouring question kept in abeyance for the present.

## GERMAN PHARMACEUTICAL NEWS.

*(From our Berlin Correspondent.)*

**THE PATENT STATISTICS FOR 1889** show that applications for protection have considerably increased; in 1888 the number was 9,869, last year it reached 11,645. Of the eleven and a-half thousand applications only 4,406 were granted. This brings up the total number of letters patent issued to 50,780, of which 12,732 remain effective.

**SHAVING AND SMOKING.**—A case of blood-poisoning, probably by absorption of nicotine, happened the other day in Oldenburg. An officer had the common mishap to slightly cut his lip during the operation of shaving. Attaching neither importance nor plaster to the wound, he proceeded later in the day to smoke a cigar. The juice of "the weed" seems to have induced all the symptoms of blood-poisoning, and although medical assistance was almost immediately at hand the patient died after great suffering.

**PHARMACEUTICAL SIGNS.**—It is the custom in Germany to adopt a sign for the pharmacy, as the taverns and public-houses do in England. These are drawn from the animal kingdom, from history, from mythology, and from the illustrious company of the saints, but special favourites are perhaps "The Eagle," "The Swan," "The Lion," "The Stag," and "The Unicorn." We have at present in this city 119 "apotheken," only thirteen of which are not designated in the symbolic manner indicated; these thirteen show only the names of the proprietors. Among the more recently-opened businesses patriotic titles are observable, such as the "Hobenzollern," "Reichsadler," "Moltke," and (of course) the "Bismarck" Apotheken. A century ago there were only twenty-one pharmacies in Berlin.

**A CHEMICAL REMEDY FAILS!**—It is the way of the world, even of the scientific section, to publish with due prominence the record of success and to preserve a discreet silence concerning failure. It may be, therefore, reasonably assumed that among the new remedies which are daily announced as "preferable to all others," as "invaluable additions to materia medica," &c., there should not be wanting a certain proportion of which we would never hear at all. Professor Kobert has departed from this time-honoured custom by publishing an account of his physiological researches on "Orthine," the chemical constitution of which aroused the expectation that it would prove of high antipyretic virtue. The compound has turned out to be of no use either as an antipyretic, anodyne, or antirheumatic; its indubitable reducing powers also did not prove of much value in the treatment of skin diseases.

The ichthyosaurus lived of yore  
In the region of Timbuctoo,  
When the water was H<sub>2</sub>SO<sub>4</sub>  
And the air was CO<sub>2</sub>.



## THE RAILWAY RATES INQUIRY.

## EVIDENCE ON BEHALF OF THE CHEMICAL AND DRUG TRADE.

AT the Board of Trade inquiry on the 7th inst., at the Westminster Town Hall, before Lord Balfour of Burleigh, Parliamentary secretary of the Board, and Mr. Courtenay Boyle, C.B.,

Mr. David Howard was examined by Mr. Roland Whitehead. He said: I am a member of the firm of Howards & Sons, chemical manufacturers, at Stratford, and am chairman of the council of the London Chamber of Commerce. I have taken an active interest in the proposals of the railway companies. I have been president of a great many meetings, and have been present at all the meetings of the council at which the matter has been discussed. I am also a member of the executive committee of the Mansion House Association. The London Chamber of Commerce have lodged a set of objections; twenty-four of our trade sections have sent in objections for each trade, and particulars of these objections have been duly lodged, and can be supplemented by evidence. If we were to call all the willing witnesses which we could provide I am afraid it would not suit the time of the Court. Our objections deal in the first place with classification. The general effect, in my opinion, is to considerably raise the articles from one class to another.

Mr. Courtenay Boyle: As compared with the railway clearing-house classification?

Mr. Howard: Yes.

Mr. Courtenay Boyle: Not as compared with the statutory classification?

Mr. Howard: Of course the vast proportion is not contained at all in the statutory classification.

By Mr. Whitehead: Our objection to classification in excess of what is intended to be actually charged is that it gives the trader a double uncertainty as to what he will be charged. In the first place he is uncertain as to what price he will be charged, in addition to the uncertainty of the rate he will be charged; thus instead of one uncertainty we have two. And in some cases there are both an advance in the classes of the article and also an advance in the rate as proposed in the schedule, the increase, without taking exceptional cases, amounting in the case of certain articles to something like 200 per cent. Another point in our objections is that many of the very useful terms, such as "collected and delivered" and "at owner's risk," which have hitherto been adopted by the railway companies, have been omitted. In our opinion they are extremely beneficial. The question raised as to the impossibility of discovering a false declaration appears to us to be perfectly unreasonable, because, although in the railway companies' proposals there are cases of goods proposed to be put in different classes which are absolutely indiscriminable without opening or unpacking and examining, yet in some cases even the examination of the package after opening would not show what classes they were in. Take, for instance, "drugs in hampers." They are now in the fourth clearing-house classification, and they are proposed to be placed in the fifth class. At present drugs in hampers are in the fourth class. In the proposed classification drugs are in the fifth and drysalteries in the fourth class.

Mr. Whitehead: And these two goods, drugs and drysalteries, even when unpacked, are to you, as an expert in the matter, entirely indistinguishable?

Mr. Howard: For a vast number of cases the same goods are contained in consignments of drysaltery and in consignments of what are known as drugs, which include chemicals. The bodies I represent are in favour of extending the practice of carrying goods at owners' risk universally, and it would be a great convenience to a large number of trades if there were a definite rate for the use of a truck from one point to another without exact regard to the load. A maximum load, of course, would be charged, but matters should be so arranged as to make it a convenience to both parties to charge the truck-load instead of the exact load. The cheaper chemicals are habitually charged at truck rates from point to point.

Mr. Whitehead: If it were not so, would you be able to carry on the trade?

Mr. Howard: We should certainly buy our alkali in Germany, and not in the North of England.

Mr. Courtenay Boyle: Cheaper chemicals are carried at a truck-rate; that, I understand, is your answer?

Mr. Howard: Yes.

Mr. Courtenay Boyle: I do not quite follow: is there a special rate for a truck, or a special rate for a minimum consignment?

Mr. Howard: In that case there is a special rate on a certain quantity.

Mr. Pope: Is it called a truck-rate or a minimum quantity?

Mr. Howard: Accurately or inaccurately, it is called a truck-rate. I cannot say what is the special name that the railway companies give it.

Mr. Courtenay Boyle: Can you give us a consignment note or a railway account showing it? Can you get one for us?

Mr. Howard: I cannot get one, because it is generally the consignor who has it.

Mr. Pope: If you give a specimen of the rate, we can see exactly what is charged. You said alkali. Alkali from where to where?

Mr. Howard: Messrs. Brunner, Mond & Co. give us a special rate for alkali delivered in truck-loads.

Mr. Pope: They are alkali manufacturers?

Mr. Howard: Yes. What I argue is that the convenience which is found so invaluable in certain cases should be as widely spread as possible.

Mr. Whitehead: Passing now to the question of dangerous goods, this, of course, is of great importance in your trade?

Mr. Howard: It is important to my trade amongst others.

Mr. Whitehead: And you would desire that some definite arrangement should be come to, and that in the schedule there should be stated clearly what are and what are not dangerous goods?

Mr. Howard: We consider it very desirable that it should be definitely settled. At present, it is left to the railway company to decide what are and what are not dangerous goods.

Mr. Whitehead: And in effect the Report of the Royal Commission on Railways in 1867 should be carried out. That report says, "We consider that a railway company should be bound to carry, if required, dangerous goods at a reasonable maximum rate for their convenience, and subject to such regulations for safety as may be defined by their bye-laws."

Mr. Howard: It is very important that that recommendation should be carried out.

Mr. Whitehead: And it is desirable that it should be compulsory upon the railway companies?

Mr. Howard: Yes. In the absence of such provisions these goods are carried very largely undeclared, and, in fact, smuggled. We believe it to be a grave public danger, and that smuggling is entirely caused by the fact that no such provisions have been made in the past, and very imperfect provision is now made, for the carrying of those goods under proper regulations.

Mr. Pope: They are carried now under regulations, but they are smuggled in spite of the regulations?

Mr. Howard: They are carried under regulations which are so utterly impossible to fulfil in a great many instances, that the smuggling goes on with the full knowledge of the railway managers.

Mr. Whitehead: Could you give any instances of that?

Mr. Howard: There are a large number of inflammable liquids, from benzol to benzine, with which people clean their gloves, and ether which photographers use, and which are to be found over the whole of England, and I can produce evidence, documentary evidence if necessary, that they are smuggled. Of course it is difficult to find anyone who actually does smuggle them, and who will give evidence of it, because it is criminal; but our customers say, "Why do you not do it, because everybody else does it?"

Mr. Whitehead: And do you think that there would be any difficulty in agreeing upon a list of dangerous articles?

Mr. Howard: No difficulty whatever.

Mr. Whitehead: You yourself could suggest such a list?

Mr. Howard: I think Colonel Majeudie could in a moment—any expert could.



Mr. Whitehead: With regard to station terminals, do you think that the increased cost of traffic coming to London and traffic going from London would be a very serious danger to the trade of London?

Mr. Howard: The trade of London is so very largely a distributive trade that the incidence of high station terminals, which in that case will fall both upon the goods coming in and upon the goods going out, would tend very greatly to prevent that trade being carried on at all. The goods would not pass through London if excessive terminals were charged in London. It is a matter of great importance to any distributing centre to avoid high station terminals, but it is a matter of greater importance to London than to any other part, because the goods would pay them both ways. I believe that the importance of the question of the high or unevenly levied rates upon the trade of London is almost beyond the possibility of calculation. It is almost impossible to say how serious might be the effect of anything which greatly raised the cost of carriage to and from London, and that essentially affects the question of smalls and the question of fractions of tons and the question of empties, as a very large proportion indeed of the traffic business of London is done in quantities under a ton; and the universal consensus of the trades we have consulted is that small consignments are increasing in importance every year.

Mr. Whitehead: Proposals have been made with regard to smalls, I believe, by a committee of members of your chamber of commerce?

Mr. Howard: There have been several proposals made.

Mr. Whitehead: And it is that question of smalls which really alarms the traders of London whom you now represent?

Mr. Howard: I consider it is most serious; it causes most alarm, and it came more home to almost all of those who take an interest in it than any of the other considerations.

Mr. Whitehead: Taking your own special trade section—the chemical section of the London Chamber of Commerce—how is that affected?

Mr. Howard: I will take, if I may, the drug section. A vast proportion—the vast majority—of the consignments of the druggists are made in quantities of less than 5 cwt., and almost the entire consignments are made in quantities of less than a ton.

Mr. Whitehead: What is the average consignment of drugs?

Mr. Howard: I cannot commit myself to that, but one of our witnesses will give you an exact figure.

Mr. Whitehead: Would you say that it is about a cwt.?

Mr. Howard: The average consignment, I believe, is about from 1 cwt. to 3 cwt.

Mr. Whitehead: In the case of chemicals have you compared the proposed maximum rates and charges with the actual rates in existence at the present time? Do you find that they exceed those at present in existence?

Mr. Howard: They invariably exceed them.

Mr. Whitehead: Invariably? Then the consideration of this question of foreign competition is a most important matter, is it not?

Mr. Howard: Yes, it is a matter of immense importance. The evidence of high rates, of course, and foreign competition touches other ports than London, and short distances from other ports render it possible for a foreigner to send to most of the great centres of England at a lower rate than the London dealer can send. Of course we cannot ask for natural disadvantages to be equalised, but it does make the question of the great possible rise in the rates that we pay a matter of the most vital importance.

Mr. Whitehead: In fact, if these proposed charges were to come into operation, it would be giving a bonus to foreign manufacturers?

Mr. Howard: Yes; and I believe that it would destroy the best part of the trade of London, not only in the case of our trade, but in the case of a great many other trades.

Mr. Whitehead: You know that the value of articles has been spoken of as one of the elements in the consideration of rates?

Mr. Howard: Of course it is only one factor. I believe, with regard to chemicals, there is an impression that chemicals are very costly and very valuable goods, and that they will bear a very high rate.

Mr. Whitehead: And that is not so?

Mr. Howard: That is not so. The tendency is, if anything, to increase their use and to diminish their cost enormously.

Mr. Whitehead: Chemicals are used now, not only as medicine, but in nearly every manufacturing process?

Mr. Howard: They are absolutely essential to all manufacturing processes, and increasingly so.

Mr. Whitehead: Take the case of soda crystals. Has the price of them decreased?

Mr. Howard: Yes. Fifty years ago soda crystals cost 12*l.* 10*s.* per ton, a few years ago they cost 5*l.* per ton, and now they cost from 2*l.* to 2*l.* 10*s.*

Mr. Courtenay Boyle: I knew that the price had fallen; but is it really so low as that?

Mr. Howard: Yes.

Mr. Whitehead: Take, again, pearlash. Has the price of that fallen?

Mr. Howard: Twenty years ago pearlash, or carbonate of potash, which is the same thing, and which we get from Germany, cost 50*s.* a cwt., and now we get it for 20*s.* a cwt.

Mr. Whitehead: Speaking generally, all chemicals have diminished greatly in price?

Mr. Howard: Speaking generally, they all have; but you might quote some out-of-the-way articles that have not.

Mr. Whitehead: Are you aware of any?

Mr. Howard: I cannot recall any that have increased in price.

Mr. Whitehead: You agree, I think, with the general proposition that you do not wish to diminish the revenue of the railway companies?

Mr. Howard: Speaking personally, I have too much at stake in railway companies to want to do such a thing, and I do not think anyone does apart from self-interest.

Mr. Whitehead: But you do wish to have the maximum fixed on such a scale that the railway companies should be responsible if that scale were exceeded?

Mr. Howard: We should have a reasonable maximum which would not enable any railway company to suddenly raise its rates and thereby injure the trades of the country. It is of the greatest importance to us to know what we have to pay, so that we may have something on which to base contracts. It is a terrible evil to trade when rates are suddenly raised to perhaps double what they were at the time of the contract.

Mr. Whitehead: And you wish that the maximum rates should be an operative check upon the railway companies?

Mr. Howard: Yes, an operative check—an actual check.

Mr. Whitehead: The question of collection and delivery is a very important question in the case of London, is it not?

Mr. Howard: It is, having regard to what I have said about the trade of London being largely distributive.

Mr. Whitehead: In your opinion, if the trader performs the cartage, for instance, in London, for himself, he should be allowed a rebate?

Mr. Howard: Yes, to the full value of the service.

Mr. Whitehead: At present, is he allowed full value?

Mr. Howard: I do not think he is; in fact, I have seen books which give the rebates which are allowed from one company to another, which certainly are very different from the rebates allowed to customers.

Mr. Whitehead: They allow customers considerably less than they allow to another railway company?

Mr. Howard: Very much less. I am not in possession of that book, but in the instances that I have looked up in it, so far as I understand, the figures were widely different.

Mr. Whitehead: The rebate allowed to a trader should be slightly less than the rebate allowed to railway companies?

Mr. Howard: Somewhat. Speaking generally, where a trader performs the services he should be allowed to have a full and reasonable rebate for those services, and he should know what he could claim, and not be left to special bargains. There should be a definite statement of what those services would be, and what he could save by doing them for himself.

Cross-examined by Mr. Pope, Q.C.: When we were in consultation with the railway managers, we were met at once with the statement, "We do not intend to raise the classification in practice, though we do in the statutory classification." We say that leaves two uncertainties instead



of one. The clearing-house classification, good as it is, is not perfect, and it is not possible to improve it.

Mr. Pope: On the question of truck-rate you alarmed me desperately when you said that if the present truck-rate were withdrawn you would get your alkali from Germany instead of from England.

Mr. Howard: That is so. I will put it in this way. If we no longer got offers of alkali and other goods in truck-loads, which we have always been told, accurately or not, were the result of truck-rates, we should buy those goods in Germany. Brunner, Mond & Co. are manufacturers of alkali under the new basic process, and they quote prices for their goods delivered in London in truck-loads. I do not know what the rate quoted to them by the railway company is. If the rate quoted by the railway company were such as to prevent Brunner, Mond & Co. from quoting to us delivered in London in truck-loads, it would not be of great disadvantage to us, because we can buy very good German chemicals at the same price. It would, however, be a disadvantage to the trade of England generally.

Mr. Pope: You spoke of "alkali." What do you mean by the term "alkali"?

Mr. Howard: It is the crude carbonate of soda, or soda ash. I cannot say how much soda ash is sent to London, but there is a very considerable quantity. It is used in soap-boiling, and the other purposes for which soda is used.

Mr. Pope: But soda is one thing; soda ash is another?

Mr. Howard: Soda ash is very largely used. It is difficult to say what it is not used for. What I want is that such a quotation may be made by the railway companies to the alkali manufacturer as would enable him to quote to me a rate delivered in London in truck-loads. The greater the extension of such facilities, the greater the advantage to trade. It is of great advantage to traders that considerable consignments should be encouraged.

Mr. Pope: It is an advantage to Messrs. Howard for instance?

Mr. Howard: I do not think it is of more advantage to Messrs. Howard than to 99 out of every 100 chemical manufacturers. Those who deal in more or less large quantities of chemicals, know that a truck-load does not cost much. A truck-load of muriate of tin does not cost very much compared with a truck-load of most goods. No doubt it costs a good deal more than a truck-load of coal, but no one proposes that it should be carried at the same rates as coal. With regard to dangerous goods, I propose that there should be a schedule of these, with a table of conditions upon which their carriage should be made compulsory.

Mr. Pope: Suppose dangerous goods were to injure other goods in transit, who would be responsible?

Mr. Howard: That would depend upon whether they were carried along with other goods and if they were carried lawfully; we have not proposed that they should be carried along with other goods so as to injure them.

Mr. Pope: But you say that the conditions now imposed by the railway companies make the carriage of dangerous goods impossible, and they are therefore smuggled?

Mr. Howard: The conditions are unreasonable, and render the carriage practically impossible. In a great number of cases the railway companies refuse to carry them except in ton lots or even in larger quantities, except in case of samples, where they charge 5s. as the minimum rate. I am distinguishing between dangerous goods which are explosive and those which are inflammable or corrosive. I should say there is no difficulty in carrying them at owners' risk altogether. I think owners would be willing to take the risk of occasional damage to other people's goods, rather than be subjected to the present state of affairs. I think my proposition is perfectly practicable. I cannot undertake to give all the conditions which are required to work it out, but I know that there are provisions made for the carriage of certain goods. Many of the railway companies will carry acid on certain days and from certain stations. That, so far, meets the difficulty with regard to acids. It appears to me from the fact of there being such provisions that it would be wiser to increase the facilities than to run the grave risk of smuggling. The arrangement between the railway company and the owner would be a similar arrangement to that which is entered into when goods are sent on the deck of a steamer, where one takes all chances of losing them.

Mr. Pope: No doubt you take all chances of losing them,

but would you take all chances of injury to anybody else? That is the point.

Lord Balfour of Burleigh: I should like to ask this general question—Have any of these considerations been present to the witness's mind before he came here?

Mr. Howard: Undoubtedly, for years. What I have stated is the result of a portion of that consideration, but not of the whole.

Cross-examined by Mr. Littler, Q.C.: I only want to ask one question. Tell me what you would call six dozen of medicated lozenges, six dozen boxes of pills, and six packets of seidlitz powders. Would you call them "druggists' sundries"?

Mr. Howard: Yes, I should call them "druggists' sundries."

Mr. Littler: You would not call them mixed confectionery?

Mr. Howard: No, I should not; but I should not send them; they are not in my line.

Cross-examined by Mr. Pember: It appears to me that it would be possible to say that a truck-load of any given class should be carried at a given rate. A truck-load of different articles, though in the same class, would vary in amount and in the number of tons according to the relation between their bulk and their weight. There would clearly have to be a maximum, and if anyone took advantage of it to carry very bulky goods he would carry so much the fewer. A truck-load should not exceed so many tons, and if the goods were bulky the consigner could not get so many tons on a truck. I think the option of having a truck-load should be given. It would be worth having to many traders. What I ask is that lower rates for large consignments should be carried up into other classes.

Mr. Pember: In other words, that those who can send large consignments—the large traders—should have an advantage over the small?

Mr. Howard: Clearly, because it costs much less to the railway companies to have one large consignment than a number of small ones. I cannot say that in the railway clearing-house book there is at present a whole sheaf of regulations and consignment notes and various matters relating to the transit of dangerous goods and explosives. If you say that those general regulations are settled by the Board of Trade I will take the fact from you. The conditions in the clearing-house book apply to certain classes, but they are not such general conditions for the carriage of general goods as enable the general goods to be carried practically without smuggling. I have only studied the regulations with care when I wished to see whether they met the cases I had to deal with.

Mr. Pember: Kindly tell me one commodity with which you deal which does not come under these general regulations.

Mr. Howard: I am not aware of any condition by which you can send a dozen quart bottles of sulphuric ether properly packed to Birmingham. I do not think you can send it under any conditions; at any rate, you could not a short time ago, and you would have to pay for a whole ton load.

Mr. Pember: Are you under the impression that there is no regulation here with regard to sulphuric ether?

Mr. Howard: There is no regulation which enables me to send it in ordinary commercial quantities.

Mr. Pember: Here are gazogen ether, hydrogen gas, and nitrous-oxide gas. I suppose it would come under one of these, would it not?

Mr. Howard: I do not know what gazogen ether is; it is not sulphuric ether.

Mr. Pember: "Ether," gazogen ether I do not suppose is any particular term.

Mr. Howard: I beg your pardon. If I understand this rightly, they must be packed in cylinders made of wrought iron or steel, and capable of resisting a pressure of 3,500 lbs. to the square inch, except in the case of ether in bottles in sawdust, packed in cases, or in square tins or drums in sawdust, packed in cases, not exceeding 56 lbs.

Mr. Pember: It is obvious that you may send four quart bottles in sawdust packed in cases. Why do you not do so?

Mr. Howard: Because until quite lately they were refused. Except in cases where there was a ton rate a whole ton was charged.

Mr. Pember: That shows that you have not studied this table, or very little, at all events. You say they are to be



in bottles in sawdust, and not to exceed 56 lbs. How much do four bottles weigh?

Lord Balfour of Burleigh: With the packing?

Mr. Howard: They could be so packed as not to exceed 56 lbs.

Mr. Pember: Now turn to page 125, and see, as you can send them like that, what it would cost. At that page we have the same things—gazogen, ether, hydrogen gas, and so on. Ether in square tins or drums in sawdust, packed in cases, not exceeding 56 lbs. They go under the third class, minimum charge for consignment, 5s. Now, were you aware that you could do that?

Mr. Howard: I was aware that we could send at a minimum charge of 5s. I knew about the four quart bottles. My complaint was, not that we could not get the goods carried under a ton, for I stated that small sample consignments were allowed to be sent at a minimum charge of 5s. I said that I could not send 12 quart bottles of ether so that the effect of this peculiar package and peculiar rules, with 5s. for each lot, were so onerous as to destroy the trade. Packing in a case of sawdust adds greatly to the cost.

Mr. Pember: Does it not come to this—not that you cannot send these things by regulations which the Board of Trade have made, but that you do not like the Board of Trade regulations?

Mr. Howard: The result of the Board of Trade regulations is to throw the trade entirely in the hands of those who will break them. We do not—I certainly do not—like these regulations; and if they are the Board of Trade regulations, then I do not like the regulations of the Board of Trade. I believe they have been made to safeguard the public; but I believe that, in reality, they increase the danger to the public because they are practically inapplicable.

Lord Balfour of Burleigh: I believe the regulations are made and submitted to the Board of Trade in draft, and that the function of the Board of Trade is to approve of them. (To Mr. Howard): Have you ever sent in any protest to the Board of Trade against the regulations?

Mr. Howard: We have protested again and again to the railway managers, and the chairmen of railway companies, and others, but we were not aware that the Board of Trade were responsible for the regulations—for their inception.

Mr. Pember: Not the inception; no one has said they were.

Mr. Howard: I do not think I should blame the Board of Trade for what they have done.

Lord Balfour of Burleigh: It is not a question of blame. I am asking you whether, as the Board of Trade have to approve the regulations—and to that extent the Board of Trade will accept the responsibility for them—have you or your trade, with your knowledge, ever presented any protest to the Board against the regulations?

Mr. Howard: I believe that representations have been made by others, but I cannot speak of my own knowledge.

Mr. Pember: You say that smuggling takes place now. How does it go on?

Mr. Howard: A little of the dangerous article is put in packages of other things. It is not a question so much of large quantities, and it is exactly my point that trade cannot be carried on in this way. Small quantities are required by every grocer and every chemist in England, and there are no provisions for sending moderate quantities, except under the stringent conditions I have mentioned. The consequence is that small quantities are sent along with other goods, to the danger of the public. No doubt the rate for dangerous goods would have to be higher than the ordinary rate, but it need not be a practically prohibitive rate. If more facilities and more accommodation were given for the actual requirements, there would be much less smuggling. I look upon 5s. as a practically prohibitive rate when the value of the article is only 2d. In regard to smalls, I am perfectly aware that the exercise of the existing powers of the Great Western Railway would destroy the whole trade in small parcels. Any advance upon the existing clearing-house table would frightfully damage the trade of London, and extinguish some of it.

Mr. Pember: But under the existing Acts of the Great Western, at all events, they can go to any height they please above the clearing-house rates?

Mr. Howard: They might destroy the trade.

Mr. Pember: Quite so; but they would not be able to

destroy the trade a bit more if they had the proposals which they have now made to the tribunal legalised than they would before, would they?

Mr. Howard: Our argument is not that the present proposals of the railway companies are in excess of their old conditions.

Mr. Pember: In excess of what?

Mr. Howard: In excess of the old conditions.

Mr. Pember: What old conditions?

Mr. Howard: Their statutory conditions.

Mr. Pember: How do you make out that?

Mr. Howard: I say we do not argue that they are in excess; but what we understood was that this inquiry was to give us a basis of much greater certainty than we had before. We were perfectly aware that the whole trade could be stopped. What we ask is that we shall know what to expect, and that these conditions shall be right and reasonable. We have no reason to suppose that they would be more likely to charge prohibitory rates under the proposed rates and charges than they did under the old system.

Mr. Pember: You spoke of the change that was proposed with regard to the rates for drugs and drysalteries. Is there any such great change proposed?

Mr. Howard: Drysalteries I cannot speak for.

Mr. Pember: Much higher than they were before?

Mr. Howard: I spoke of drugs being higher, but I carefully guarded myself against speaking about drysalteries.

Mr. Pember: Drugs not otherwise provided for in casks or bales are in the third class in the clearing-house book, are they not?

Mr. Howard: Yes, they are. And in boxes, crates, or hampers they are in the fourth class. In jars, bottles, carboys, or parcels they are in the fifth class.

Mr. Pember: So that we have three sorts, in the third, fourth, and fifth classes?

Mr. Howard: Yes.

Mr. Pember: In fact, if one took an average, it would be the fourth class if they all went in equal quantities?

Mr. Howard: Yes, but it would be very unwise to take an average.

Mr. Pember: Now, what is the proposed classification?

Mr. Howard: Fifth class for boxes, crates, or hampers.

Mr. Pember: That is to say, that in casks, bales, or bags, they remain where they were, in the third?

Mr. Howard: That I cannot say without reference.

Mr. Pember: Then did you give your evidence without knowing that fact?

Mr. Howard: I spoke of goods "in hampers."

Mr. Pember: Quite so; but you must look at the article as a whole. Will you take it from me that for casks and bales or bags they remain in the third class as they were?

Mr. Howard: That is my impression.

Mr. Pember: Very well; and I quite admit that boxes, crates, or hampers go into the fifth class.

Mr. Howard: That is proposed.

Mr. Pember: That is proposed, and that is the only change; jars, bottles, carboys, and parcels being in the fifth class now?

Mr. Howard: Yes.

Mr. Pember: With regard to drysalteries, it is just worth suggesting to you that in casks they are at present in the third class, in boxes or hampers in the fourth, and that they remain in those two classes under the proposed classification.

Mr. Howard: Might I remind you of what my statement was, that there certainly must have been in the minds of those who compiled the proposed classification a possibility of distinguishing between different consignments appearing exactly alike outside, and that drysalteries were undistinguishable by any possible outside observation from drugs? Undoubtedly, I think, it is a great hardship that drugs in hampers should be raised from the fourth to the fifth class, but I leave other witnesses to give evidence upon that matter.

Mr. Pember: I merely wanted to show that as you spoke of drugs and drysalteries, and said they have been raised in classification, the one single change is in drugs in boxes, crates, or hampers.

Mr. Howard: I only spoke of them in hampers. I might have spoken of boxes too.

Mr. Pember: With regard to this question of drugs and



drysalteries, I think your point was that dry drysalteries in the proposed classification, "except otherwise herein provided," are put in the fourth class?

Mr. Howard: They are put in the fourth class, whilst in the proposed classification drugs, "except otherwise herein provided," are in the fifth class; and there are no means of distinguishing drugs and drysalteries in that manner if unpacked. A vast number of goods may be reckoned in connection with the trade of the sender. They always have been so distinguished, and, therefore, the railway companies are proposing to that extent to rely on the honesty of the traders.

Mr. Pope: Does Mr. Howard mean to say that the trade do not quite quite understand the difference between a drysaltery and a drug?

Mr. Howard: No; what I do say is that nobody using a hamper, or even an unpacked consignment, can always state to which class the goods belong.

Mr. Pope: Cannot you?

Mr. Howard: No, I cannot. There are a large number of goods which would be reckoned according to circumstances. If we sent them they would be considered drugs; if a drysalter sent them they would be called drysalteries.

Mr. Pope: Mention one of them.

Mr. Howard: Epsom salts goes in consignments of either.

Mr. Pope: That is not a drysaltery.

Mr. Howard: It is sent by drysalters very largely, and for large quantities there is a lower rate. I take it from this that it is generally sent in casks. Oxalic acid is also largely sent by drysalters.

Re-examined by Mr. Whitehead: With regard to truck loads, from our own experience of our trade with Messrs. Brunner, Mond & Co. we have discovered that if we can get a low rate for a large consignment it is beneficial to trade. And not only in their case but with a good many other people. The fact of being able to get consignments in considerable quantities, which are commonly called "truck loads," is of great benefit to the trade. At present that principle is admitted by the railway companies and acted upon by those who offer us goods.

Mr. Whitehead: And if not acted upon at present you think that in future it will be very detrimental to trade?

Mr. Howard: It would divert a large proportion of the trade to foreign houses.

Mr. Whitehead: With regard to dangerous goods, you have stated that in your experience the present practice is extremely onerous, and that it falls especially hardly upon small traders?

Mr. Howard: It is in the small consignments under 2 tons that the conditions are so exceedingly difficult? The present regulations are undoubtedly a premium upon the dishonesty of the traders? All the requirements of the trade are met by smuggling.

Mr. Whitehead: And further than that, even supposing that the existing regulations are proper regulations, being sanctioned by the Board of Trade, can you see any guarantee in the present schedule that they will be continued?

Mr. Howard: There is absolutely no statutory obligation to carry them out. What we require is that regulations should now be made which would meet the requirements of trade, as well as the reasonable requirements of the railway companies and the general public. In coming to such a decision the opinion of the trade should be taken upon the point because it involves a number of technical questions.

Mr. Whitehead: With regard to "smalls" your desire is, supposing the existing regulations in London are proper, that, now that the question is being dealt with by this tribunal, you should get a guarantee for the continuance of the existing practice?

Mr. Howard: That we should have a guarantee that what forty years' experience has proved to be a fair and reasonable allowance for the extra cost of the carriage of "smalls" should be continued, and not at any moment withdrawn. It is our desire that that should be a statutory obligation upon the companies. I will not say absolutely the clearing-house classification, but a certain margin, say, 20 per cent., on that would appear to be fair. With regard to the 5s. minimum, going back to dangerous goods, in some cases an article, the intrinsic value of which is only 2d., would be charged 5s. for mere conveyance. If anyone wanted a small bottle of benzine collas to clean gloves with, the actual value of the

liquid would probably be 2d., and the minimum charge in that very elaborate and unusual package would be 5s. It would cost the recipient of it about 7s. 6d.

Lord Balfour of Burleigh: Why should he be obliged to have it sent to him by rail?

Mr. Howard: How else can he, my lord?

Lord Balfour of Burleigh: Why cannot he get it from the place nearest his own residence, where it would come in large consignments?

Mr. Howard: But in the case of many of these towns, my lord, a ton consignment would last a large town a twelve-month.

Lord Balfour of Burleigh: But there is the 4-quart bottle, you know.

Mr. Howard: The 4-quart bottle is an extremely awkward and inconvenient mode of conveying such goods in the case of a great many of these things.

On Tuesday, Mr. Marshall Stevens was cross-examined by Mr. Littler, Q.C., on behalf of the Lancashire and Yorkshire Railway Company upon the question of returned empties. He was asked whether in the drug trade all the returned empties were exceedingly light?

Mr. Stevens: No they are not. They include jars and bottles in hampers which sometimes weigh heavily.

Mr. Littler: How much of the stuff that goes in jars is included in fifth class rates?

Mr. Stevens: The proposal is to put the whole of it in the fifth class, and empties are to be returned at the same rate as the goods were carried, at what would also be fifth class.

Mr. Littler: As a rule is it not a fact that the traffic carried at fifth class rates is exceedingly light?

Mr. Stevens: There are many exceptions. I am not acquainted with the details myself, but a witness will be called who will give 12 months' returns of the actual traffic and the weight of the empties returned.

Mr. Littler: Some reference has been made to the raising of the classification of "medicated lozenges," which had previously gone under the head of "confectionery." Do you happen to know, as a matter of fact, how the re-classification came about?

Mr. Stevens: Only from the correspondence which has been put in.

Mr. Littler: As a man of practical experience, are you prepared to maintain that a package containing 10 parcels of pills of five different sorts, 50 bottles of chlorodyne lozenges, and a parcel of seidlitz powders, ought to be described otherwise than as "druggists' sundries"?

Mr. Stevens: No, but the matter was only mentioned incidentally in order to show that a railway company could raise their rates without giving notice to the Board of Trade. Whatever the goods were, the fact remains that the rate to Mr. Gibson of Manchester from that town to Edinburgh was suddenly raised by 10s. per ton.

Lord Balfour of Burleigh: But it is obvious that the rate was not advanced upon a rate which had been correctly described and that is the point upon which the whole thing turns. It was rather something in the way of stopping a fraud.

Mr. Balfour Browne: I do not think your lordship ought to say that. It is a very serious imputation to cast upon any trader to say that he has been guilty of a fraud.

Lord Balfour of Burleigh: I only intended to say that that was the contention of the railway company.

Mr. Littler: We distinctly assert that we altered the rate because we found that that which was declared to be "confectionery" was not "confectionery."

WHALE'S MILK.—Professor Percy F. Frankland and Mr. F. J. Hambly have examined a small sample of the milk of a bottle-nosed whale. The milk presented a thick creamy appearance, globules of fat being clearly discernible in the mass, which was possessed of a strong fishy odour. Analysis showed that the milk consisted of total solids (dried at 101°–105° C.), 51.33 per cent.; water, 48.67 per cent.; non-fatty solids (insoluble in ether), 7.57 per cent.; fat (soluble in ether), 43.76 per cent.; and ash, 0.46 per cent. The milk was thus enormously rich in fat, and it also contained spermaceti.



## Trade Report.

**Notice to Retail Buyers.**—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., February 13.

THE markets have not shown any features of absorbing interest this week, and complaints of slackness of trade, especially in the department of medicinal drugs, are still more frequent than one could wish. In fine chemicals there have been several changes of more or less importance. Acetic acid is rising, but in citric and tartaric acids and cream of tartar the market is very weak and rather lower. Quinine firm, but quiet. Glycerine steady. For morphia rather higher prices are asked, and veratrine also is likely to advance in consequence of an important rise in *Sabadilla* seed. Refined camphor is dearer, English as much as 3*d.* per lb. In the drug market the alterations are very slight; opium is very steady, but quieter; Tonquin beans and jalap are reported higher in America; saffron continues to advance, and thymol is quoted higher. Star-anise and cassia oils are weak, menthol and oil of cloves a turn easier. Senegal gum arabic has had an important fall. Cinchona sold at very full prices at the auctions. In the outside markets the movements have been much more numerous. Gambier and cutch remain very firm, but shellac may be had at lower rates. Sulphate of ammonia and bleaching-powder are tending upward, and soda ash and crystals, caustic soda and sulphate of copper may be placed in the same category. Gum olibanum and kowrie firm. Madagascar animi dearer, but Zanzibar animi is lower. Olive oil very firm; cottonseed oil, linseed oil, rape oil, and turpentine higher. In spices black and white pepper, cloves and chillies are easier, but new Cochin ginger and small nutmegs bring rather better prices.

THE SALE CONDITIONS OF CINCHONA BARK.—At this week's cinchona auctions a memorandum was read, setting forth certain alterations in the sale conditions of Bolivian Calisaya bark, suggested by the quinine manufacturers and their representatives. The new conditions asked for were: (1) Each package to be sampled and separate samples to be shown by the selling brokers as heretofore. (2) Buyers to accept these samples at the contract prices, and to pay only for the actual net weight of these samples as delivered to them. (3) The interest on all prepayments made in exchange for delivery orders before the expiration of the usual prompt to be allowed to the buyers at the rate of 5 per cent. per annum. The new terms were proposed by Messrs. W. H. Cole & Co., seconded by Messrs. Howards & Sons, and supported by Messrs. Wiedenmann, Broicher & Co., F. W. Heilgers & Co., H. Buchler, O. Andreae & Co., and Thos. Whiffen, and were at once agreed to by the brokers on the part of their principals, the importers.

CINCHONA AS A SPECULATIVE INVESTMENT.—A certain amount of attention was excited at the cinchona auctions on Tuesday by the bidding of a firm of bark brokers for several parcels of manufacturing bark. The firm have been making purchases of bark at the auctions for some time, but on a much smaller scale, and it is generally thought that they act for some one who believes cinchona to be a valuable article for investment, and is holding his purchases for speculative purposes. At Tuesday's sales the firm in question secured about 52,000 lbs. of bark at a total outlay of something like 850*l.* These transactions are looked upon as indicative of reviving confidence in the article.

ACID (ACETIC).—The enhanced cost of some of the raw materials, and an exceptional demand for others, have affected quotations for acetic acids. The members of the

combination in Germany who control this article have decided to put up their prices about 10 per cent., but the new quotations are not actually fixed yet.

ACID (CITRIC).—The market has been easier this week, and sales have been made at 1*s.* 3*d.* per lb. by second-hand holders; we also hear of a transaction at 1*s.* 2½*d.* per lb. cash terms. The imports of concentrated juice in London and Liverpool during January have been 599 pipes, against 741 pipes in January 1889. The new crop has been coming forward rather largely in Italy (as is generally the case at this period of the year), and orders are said to be few. The market consequently has declined somewhat, although the quotation here is still 14*l.* 17*s.* 6*d.* per pipe, f.o.b. Messina.

ACID (OXALIC).—Very scarce, with a regular demand at 3*d.* per lb. *Sal acetos*, 4½*d.* to 4¾*d.*

ACID (TARTARIC).—The market remains unchanged with sellers of English acid at 1*s.* 3*d.*, and more foreign offering as low as 1*s.* 2½*d.* It was reported that there were buyers at 1*s.* 2½*d.* for forward delivery of foreign acid. Lawes' brand is held at 1*s.* 3¼*d.* per lb. on the spot, and 1*s.* 3½*d.* for forward delivery.

AMMONIA SALTS.—*Sulphate*: rather firmer, London 24 per-cent. grey, 11*l.* 17*s.* 6*d.* to 12*l.*, Beckton terms 11*l.* 16*s.* 3*d.*, Hull 11*l.* 17*s.* 6*d.*, Leith 11*l.* 16*s.* 3*d.* *Carbonate* remains very quiet at 3½*d.*; for *Sal ammoniac* there is a very strong demand at the recent advance of 37*s.* for first and 35*s.* for second-hand quality crystals.

ARSENIC has been in rather better demand at 13*s.* 3*d.* to 13*s.* 6*d.* for best white powder.

BENZOL remains firm at 4*s.* for 90 per cent., and 3*s.* 2*d.* for 50 per cent., at which prices there are sellers.

BLEACHING POWDER.—Still held at full prices, Tyne and Lancashire, 5*l.* 8*s.* 9*d.* to 5*l.* 10*s.*; London, 6*l.* 15*s.*, nearest quotation.

BORAX.—Firm at 28*s.* 6*d.* to 28*s.* 9*d.* from second-hand holders, makers' prices unchanged. *Boracic acid* steady.

CAMPOR (CRUDE).—There have been four different arrivals from Japan since our last report, aggregating 449 packages, but we understand that the bulk of this has gone to the refiners already. We hear of no business this week, and it is therefore difficult to give a quotation, but a couple of days ago there were buyers, but no sellers, at 145*s.* per cwt. "c.i.f." terms, steamer named.

CAMPOR (REFINED).—On Friday last the *English* refiners put up their quotation again from 1*s.* 8*d.* to 1*s.* 10*d.* per lb. and to-day they advanced the price another penny, viz., to 1*s.* 11*d.* per lb. for bells. There have been transactions in *German* refined at 1*s.* 7*d.* per lb. early in the week, and since at 1*s.* 7½*d.* per lb. in second-hand. To-day one of the foreign agents named 1*s.* 9½*d.* per lb. as his price; others quoted 1*s.* 8*d.* per lb., but were awaiting further instructions.

CANTHARIDES.—*Russian* dull of sale at 3*s.* 8*d.* per lb. c.i.f. *Chinese* flies are very neglected, and quoted at 9*d.* per lb., though we do not hear of any buyers at that price.

COPPER (SULPHATE).—Very firm, and if anything rather higher; very little is offered. It is thought there will soon be a further important advance. At present the spot stuff is held at 25*l.* 10*s.* to 26*l.*

CREAM OF TARTAR.—Again somewhat easier to buy, at 102*s.* for best white *French* crystals. *German* powder, 105*s.*

CINCHONA.—The quantity of bark offered at Tuesday's auctions (leaving the parcels of old Cuprea out of the calculation) was a moderate one. It consisted of:—

	Packages	Packages
Ceylon bark .. ..	1,360 of which	1,053 were sold
East Indian bark ..	827 "	688 "
Java bark .. ..	40 "	35 "
South American bark	1,427 "	243 "
West African bark ..	146 "	146 "
Total .. ..	3,800 "	2,176 "

The sales commenced with very steady bidding, which became brisker as they proceeded, and some parcels of rich bark especially were competed for with much animation



by the buyers. The assortment offered included an unusually large proportion of the more valuable grey and yellow East Indian barks, and the Ceylon barks were also fully up to the average. A not inconsiderable proportion of bark was bought for what is believed to be a speculative purpose. The general view appears to be that the average unit is as nearly as possible 2*d.* per lb., which shows a slight improvement in value on the preceding sales. The following are the approximate quantities purchased by the principal buyers:—

	Lbs.
Agents for the Mannheim and Amsterdam works..	108,390
„ the Frankfort o/M. and Stuttgart works ..	78,468
„ the American, French, and Italian works ..	67,892
„ the Auerbach factory .. .. .	48,917
Messrs. Howards & Sons .. .. .	39,736
Agents for the Brunswick factory .. .. .	37,594
Sundry druggists .. .. .	86,702
Total quantity sold .. .. .	467,699
Bought in or withdrawn .. .. .	238,545
Total amount of bark catalogued .. .. .	706,244

It should be well understood that the mere weight of bark purchased affords no guide whatever to the quinine yield represented by it, firms who buy a small quantity of bark by weight frequently taking the richest lots, and *vice versa*. An analysis of the catalogues gives the following prices for sound bark:—

**CEYLON BARK.**—*Original.*—Red varieties: ordinary to fair branch chips, 3*d.* to 4*d.*; dull to fair stem chips, 2½*d.* to 3*d.*; good stem shavings, 3½*d.*; fair to bright bold mixed shavings, 3*d.* to 4½*d.*; chips and shavings mixed, 2½*d.* to 3*d.*; dull to fair but dusty root, 2*d.* to 3½*d.* per lb. Yellow and grey varieties: fair to good strong chips, mixed with branch, 4*d.* to 5½*d.*; dull chips and shavings mixed, 3½*d.*; ordinary to fine rich stem chips, 3*d.* to 6½*d.*; fair spoke shavings, 5½*d.*; 3 bales of rather dark root, 10*d.* per lb., a price which has not been known for a long time. Hybrid chips and shavings, dull weak to good, 2¾*d.* to 6½*d.*; good spoke shavings, 6½*d.* to 7*d.* *Renewed.*—Red varieties: weak to good medium chips, partly bold mixed, 3½*d.* to 5*d.*; a fine lot, 7*d.* per lb.; shavings and chips mixed, 4*d.*; ordinary weak shavings, 2¾*d.*; good to fine rich ditto, 6*d.* to 9*d.* per lb. Yellow and grey varieties: medium crown chips, 5½*d.* to 6*d.*; fine bright and strong ditto, mostly Ledger, 9*d.* to 10½*d.*; fine spoke shavings, 9*d.* to 10½*d.* per lb. Fair Hybrid stem chips, 4¾*d.* to 6*d.* per lb.

**EAST INDIAN BARK.**—*Original.*—Red varieties: A large quantity of ordinary to fair chips, 2½*d.* to 4*d.*; good partly bold ditto, 4½*d.* to 5*d.*; good chips and shavings mixed, 6½*d.*; druggists' quill, thin to medium, silvery coated, 6*d.* to 7*d.*; duller and more broken ditto, 5½*d.*; dust, 1½*d.*; root, 3½*d.* per lb. Yellow and grey varieties: ordinary and dull branch chips, 4*d.* to 5½*d.*; good to fine rich bold ditto, 6½*d.* to 9½*d.*; fine Ledger spoke shavings, 9½*d.*; dull chips and shavings mixed, 2½*d.*; good partly broken Ledger stem quill, 1*s.* per lb. Fair Hybrid shavings, 6½*d.* per lb. *Renewed.*—Fair branch chips, partly bold mixed, 4*d.* to 5½*d.*; good bright strong ditto, 6*d.* to 8*d.* per lb.; good bright stem chips, 6*d.* to 6½*d.* per lb.; grey siftings and chips, 4½*d.* to 5½*d.* per lb.

**JAVA BARK.**—A few parcels of fair Ledger chips, 6*d.*, and some dusty root at 4½*d.* per lb.

**SOUTH AMERICAN BARK.**—Of cultivated Bolivian *Calisaya* bark 478 packages were offered and 248 sold at full prices; fair small to bold chips, 5½*d.*; good partly silvery but broken quill, 7½*d.* to 9*d.*; good rich stout partly broken quill, 1*s.* 1*d.* per lb. Of 50,773 lbs. offered, 26,118 lbs. were sold. Several parcels *Cuprea* bark of old import were again offered, the total being 824 bags, but the whole of this was bought in, offers ranging from 2½*d.* to 4*d.* per lb. being refused. Forty-six packages old *Soft Colombian* bark are held at 4½*d.*, and 79 ditto *Hard Pitayo* at 6*d.* per lb. After the auctions about 350 packages of the *Cuprea* were sold, at prices ranging from 3*d.* to 4¾*d.* per lb.

**WEST AFRICAN BARK.**—A consignment of 146 packages, altogether 19,340 lbs., of the *Succirubra* bark grown in the Portuguese colony of San Thomé, and just imported *via* Lisbon, was all sold. The quality was poor, and the bark badly harvested and all damaged; fair long stout quill brought 6*d.* per lb.; thinner ditto, very broken, 5*d.* to 5½*d.*; and quilly mixed chips and siftings, 4*d.* to 5*d.* per lb.

The following particulars show the prices realised by a few parcels according to analysis:—

	Percent. equivalent of quinine sulphate	Price per lb.
570 lbs. East Indian ledger quill, original ..	5.23	12 <i>d.</i>
210 „ „ „ shavings „ ..	4.18	9½ <i>d.</i>
2,120 „ „ succirubra chips, renewed ..	4.47	8 <i>d.</i>
4,040 „ „ „ „ „ ..	2.96	6 <i>d.</i> –6½ <i>d.</i>
8,060 „ „ „ stem chips, original ..	2.42	4½ <i>d.</i>
16,120 „ Ceylon succirubra shavings, renewed ..	3.36	6 <i>d.</i> –6½ <i>d.</i>
1,550 „ „ ofloinalis „ „ ..	5.12	10½ <i>d.</i>
4,203 „ South American Calisaya quills, orig. ..	3.75	7½ <i>d.</i>
9,150 „ „ „ „ „ ..	6.29	13 <i>d.</i>
9,028 „ „ „ „ „ ..	4.16	8 <i>d.</i> –8½ <i>d.</i>

The exports of cinchona from Ceylon in the periods between October 1 and January 16 have been as follows:—1889–90, 2,391,409 lbs.; 1888–89, 3,647,931 lbs.; 1887–88, 2,975,026 lbs.; 1886–87, 4,592,257 lbs. Subsequent cablegrams bring the shipments up to February 1, when they were 2,862,000 lbs. The arrivals at Colombo by rail from October 1 to February 1 were about 800 tons, against 1,535 tons in the corresponding period of 1888–9. The shipments from the Malabar Coast between July 1 and December 31 have been:—1889, 456,064 lbs.; 1888, 349,328 lbs.; 1887, 67,200 lbs.

**CUTCH.**—The London market remains exceedingly firm and a steady volume of business is taking place, including sales of *Star B.* at 30*s.* on the spot, and 30*s.* 6*d.* for January–March shipment, and of *M.M.* at 29*s.* per cwt. In Liverpool the market for good brands is firm, and prices are rather dearer than otherwise, but low-grade cutch is quite neglected.

**GALLS.**—At the end of last week a sale of 125 cases *China* galls at 65*s.* “c.f.” terms (for New York) was reported. There are sellers of *Japan* galls at the same figure, but they do not meet with any response. To-day we hear of further sales of *China* galls at 65*s.* c.f. New York, February–March shipment.

**GAMBIER.**—For delivery our market has been firm with business in *Block* at 27*s.* 3*d.* for January–February. At the sales on Tuesday 300 packages were sold without reserve and with all faults, and brought somewhat lower rates, viz. 27*s.* 3*d.* to 27*s.* 6*d.* per cwt. Eighty-three packages *Cubes* were bought in, 38*s.* per cwt. being mentioned as the price. The Liverpool market is firm at 28*s.* 6*d.* for *Block* on the spot, for arrival there are also more inquiries, especially for distant shipment, which sellers are holding very firmly, and of which little is offering.

**GLYCERINE.**—The makers hold firmly at prices, varying between 65*l.* and 68*l.* for double distilled sg. 1.260. Second-hand holders, however, have sold half ton lots, at 64*l.*, a few days ago.

**GUM ANIMI.**—Very little demand for *Zanzibar*, of which 300 packages were offered, but only a few lots sold, at an average decline of about 1*l.*; fair pale and ambery sorts, part weak mixed, 11*l.* 17*s.* 6*d.* to 12*l.*; ordinary small to fair medium ditto, 10*l.* 15*s.* to 10*l.* 17*s.* 6*d.*; red sorts, 9*l.* 5*s.* to 10*l.* 2*s.* 6*d.*; bean and pea size, 80*s.* to 82*s.* 6*d.*; and siftings at 24*s.* to 33*s.* For *Madagascar* animi, on the other hand, the demand was pretty good, and full prices were obtained; small to bold pale sorts, 6*l.* 15*s.* to 8*l.* 15*s.*; red sorts, 6*l.* 10*s.*; pale bean and pea, 5*l.* 5*s.* to 5*l.* 7*s.* 6*d.* A few packages of *Demerara* were offered, but bought in.

**GUM ARABIC.**—Fine *Turkey* and *Trieste* gums are held for high prices, and are not offered very freely. It is thought that perhaps there may be some small supplies coming forward from the Soudan in about 2 or 3 months, but at present nothing is heard of any supplies from that quarter. *Mogadore* gums are well inquired for, and the finest bold mixed white gums are selling up to 9*l.* 10*s.* per cwt., fair red mixed 6*l.* per cwt. There has been a serious decline in the price of *Senegal* gums, which are now easily obtainable at 85*s.* per cwt. for both *Galam* and *Bas-du-Fleuve*.

**GUM KOWRIE.**—There was a fair demand at to-day's sales, especially for partly scraped sorts, for which higher prices were paid. Nearly 1,150 cases were offered and sold at the following prices: scraped, fair to good amber, 77*s.* to 98*s.*;



fine, pale amber, 122s. 6d. to 142s. 6d.; a few lots of superior transparent, 107. 5s. to 107. 15s.; good pale three-quarters scraped, 68s. to 70s.; rough to good partly scraped, 47s. to 64s.; fair rough sorts down to common pickings, 44s. down to 26s.; common dark to good bright chips, 35s. to 60s.

**INSECT FLOWERS.**—The Trieste market remains steady, and the quotations are 83s. for open, 99s. for half closed, and 112s. per ewt. for closed flowers. But there is not much life in the article, the anticipated American orders not having come off yet.

**JALAP.**—It is said that the quotation in New York has risen to a parity of 1s. 1d. per lb. The B. P. resin has also been advanced in some of the manufacturers' lists.

**MORPHIA.**—The manufacturers now ask 6s. per oz. for powder, but we have not heard that that price has been paid yet. The makers are said to be very busy in this article, and there has been a good deal of buying up of second-hand parcels during the last few days.

**OIL (CASTOR).**—In London the quotation for good *Calcutta* seconds is 4d. per lb. Fine medicinal *Italian* unchanged. The Liverpool market remains firm, and small transactions of good seconds at 3½d. per lb. are reported almost daily. In *Calcutta*, on January 21, the market continued to fall and the oil-crushers had ceased to work, desiring to work off their old stocks previous to working fresh supplies. The arrivals of Bengal and up-country seed were small, and stocks also light. The new crop in Madras is said to be large, and seed from that quarter is offered at lower prices.

**OIL (COD LIVER).**—The reports from Norway state that the fish is in good condition and the fishing proceeding fairly satisfactorily. The price of 75s. per barrel, ex-ship *London*, is quoted.

**OIL (OLIVE).**—Eating oils are firm but unaltered in price. The ordinary varieties of oils, however, are steadily rising. Good *Spanish* olive oil is now quoted at 44l. "c.i.f." terms, and *Mogadore* at 38l. c.i.f., but as a good deal of this variety is expected to come forward shortly, it is not impossible that there will be cheaper offers shortly. On the spot there is but little to be had, and 38l. 10s. to 39l. is asked. *Messina* nominal. Some *Metyline* oil is offering on the spot at 40l. Business both here and in Liverpool is rather limited owing to the small quantity offered. The advance in rape oil is affecting certain grades of olive oil sympathetically.

**OILS (ESSENTIAL).**—*Star-anise* oil is rather weaker, and 6s. 2d. per lb. would probably be accepted. *Sandalwood* oil firmly held at the recent advance and not unlikely to rise further. Oil of *cloves* tending lower in sympathy with the spice. American *Peppermint* dull, at 11s. per lb. for H.G.H. *Menthol* has been sold, at 9s. 6d. per lb. this week for fair native brands, which shows a fall of 3d. to 6d. per lb. from the previous nominal quotation. The demand has quite subsided for the moment, but a serious decline would probably bring in a number of buyers. *Cassia* oil is weaker. Holders still ask 3s. 7d. per lb. on the spot, but 3s. 6d. would perhaps be accepted. The last cable quotation from China is 3s. 5½d. c.i.f., prompt steamer shipment for "genuine oil."

**OILS (VARIOUS).**—*Cocoonut*: The market remains very quiet, and only some little business is passing in Ceylon at 23s. 6d. for pipes on the spot. *Cochin* is quiet at 26s. to 26s. 6d., and *Manritius* nominal at 24s. to 24s. 6d. *Cotton-seed* oil is very firmly held and quiet, at 19s. 6d. to 19s. 9d. for raw, and 22s. to 24s. for refined, on the spot, according to quality; Hull prices are 18s. to 18s. 4½d. for raw, and 20s. 3d. for naked refined. *Linseed* oil has been rising steadily, but the market closes somewhat easier for forward delivery, spot 22s. 1½d. to 22s. 4½d., according to packing. *Palm* oil very neglected, both here and at Liverpool, which is the leading market; the London quotation for fine *Lagos* is nominally 23s. 6d. *Petroleum* firm, American at 5½d. to 5½d., Russian at 5½d. to 5½d. At auction on Friday last 532 barrels American burning oil, 300° fire test, sold without reserve at from 4d. to 5d. *Rape* oil is dearer since our last report, but a little easier at the close. English refined colza: 35s. 3d. to 35s. 6d.; for Stettin refined the same price asked; brown oil, 33s. 6d. to 34s. *Turpentine* dearer and rising, American, on the spot, 31s. 9d. to 32s.

**OPIMUM.**—The London market is quiet but firm, with small

sales of *druggist's* up to 14s. per lb. for fine and 12s. for second quality. The bulk of the transactions, however, has been in *Constantinople* opium at 13s. 6d. per lb. From *Smyrna* the news is somewhat less bullish, and according to the latest reports holders were somewhat disposed to make concessions. Rain has fallen, and the crop prospects are rather better in consequence. According to a report, which must be taken for what it is worth, the present stock of opium is estimated at 2,000 packages in Turkey, 1,200 in London, and 1,000 in the States. The consumption up to the time of the new crop is estimated at 1,800 packages, which would leave only 2,000 available, the smallest quantity known for many years.

**POTASH SALTS.**—Sales were made of a few lots of *Montreal* potashes at 21s. 9d. per cwt. in Liverpool, but there is nothing offering now under 22s. *Pearlashes*, neglected and nominal at 30s. 9d. *Bichromate* and *Chlorate* remain very firm at 4d. and 4½d. respectively. *Prussiate*, unchanged, 9½d. to 10½d., according to brand. *Saltpetre*: *Bengal* rather cheaper, with sales reported at 16s. 9d. for shipment to London. English refined, unchanged, at 21s. to 22s., and German at 18s. 6d. to 19s.

**QUICKSILVER.**—The importers' price remains unchanged at 9l. 15s. per bottle; on Friday last there were second-hand sellers at 9l. 5s. 6d., and business was done at that figure, but since then the quotation has again crept up just a little, but to-day it has fallen to 9l. 5s.

**QUININE.**—The market remains very firm, but business has been exceedingly quiet this week, and we have not heard any transactions reported with the exception of 10,000 oz. *German* brands in bulk, second-hand, at 1s. 3d. per oz. spot terms. To-day there are further buyers at 1s. 2¾d. per oz., but no sellers. The manufacturers all say that they are full of orders, and their quotations are more or less nominal. *Howard's*, *Pelletier's*, and *Zimmer's* unchanged; *B&S* and *Brunswick* do not quote; *Auerbach* is 1s. 4½d. per oz.; but the *Fabbrica Lombarda* would take orders at 1s. 3½d. on the spot, and 1s. 4d. per oz. forward. The imports of quinine into the United States were 2,445,941 oz. in 1889, against 1,904,206 oz. in 1888. The estimated equivalent of quinine sulphate in the manufacturing barks sold in Amsterdam during the year 1889 was 2,700,000 oz., or only about 10 per cent. in excess of the imports of the United States alone.

**SAFFRON** is still advancing in Spain, and the demand for consumption remains good.

**SEEDS (VARIOUS).**—*Caraway* seed is still hanging fire, and offers at 19s. 6d. to 20s. for Dutch, and 16s. 6d. to 17s. for *Mogadore* seed. For East Indian caraways 20s. is asked, which is too high. There is rather more business in *Cumin* seed, which is quoted at 25s. for Malta, 17s. 6d. for *Morocco* seed, and 25s. for East Indian. *Linseed* remains well held, Dutch seed being rather scarce. *Mustard* seed in fine white quality is not very plentiful; brown sells at unaltered prices. Business in *rape* seed is not large, in consequence of the great scarcity of supplies, particularly of English seed.

**SHELLAC.**—The market opened quietly this week, and previous to the auctions about 800 cases were sold at the "call." *Orange* TN at 73s. for February and 75s. for April, and 75s. to 75s. 6d. for June. *Garnet*, fine OCC on the spot at 78s., AC March and April 71s. At auction the catalogues comprised, of

	Cases	Cases
Orange lac .. ..	135 of which	65 were sold
Garnet " .. ..	5 "	5 "
Button " .. ..	305 "	165 "
	445	235

Prices ruled fairly steady for *Orange*, sales being made at 73s. to 75s. for fair to good seconds, and 79s. for fine ditto: but *Buttons* experienced a decline of about 3s., and realised 67s. to 77s. for common to good coloury fourths, 82s. to 89s. for fair to good seconds, 90s. to 92s. for fair, and 100s. per cwt. for fine first. *Garnet* AC block sold at 67s. per cwt., and it was lower at to-day's call, when the following were the quotations:—

	Feb.	Mar.	Apr.	May	June
Orange TN, sellers .. ..	74/	74/	75/	75/6	100 at
" buyers .. ..	73/	73/	74/	74/6	75/
Garnet AO, sellers .. ..	72/	72/6	72/	—	—
" buyers .. ..	70/	70/6	71/	—	—



Garnet lac is comparatively very dear, and is being concentrated into the hands of a few holders, one of the principal of which is an East Indian importer. After the auctions the market has been very quiet. The Calcutta market is reported, according to the latest mail news, as quiet, but the stocks are said to have been much reduced. Holders of sticklac are said to be firm and standing out for high prices, and the reports of shortage of the crop are becoming more and more acute as the season advances.

**SODA SALTS.**—Bicarbonate dearer, and with a prospect of further hardening; 6l. 5s. ex-warehouse. Good Ash very firm, and 1½d. is now asked in London; Tyne still quotes 1½d., less 5 per cent. Crystals also follow in sympathy with ash; London at 58s. ex-ship; Tyne, 49s. to 50s. Caustic soda: Last week's advance is fully maintained, and the general opinion seems to be that there will be a further rise ere long; white 60 to 70 per cent., 8l. 10s. to 9l.; cream, 8l. to 8l. 5s.; 77 per cent. on the Tyne, 9l. 10s. Nitrate of soda quiet, 8l. 5s. to 8l. 17s. 6d., according to quality.

**SPICES.**—Arrowroot very dull and without demand; nearly the whole of the St. Vincent offered was bought in, but since then 200 barrels are reported to have been sold at 2½d. to 2¾d. for fair to good quality; Bermuda, 1s. 9d. Chillies: The price has declined since last week. At the auctions 156 bales Zanzibar sold at 23s. 6d. to 27s. for very common to medium red. Cassia lignea remains very dull of sale with a few trifling transactions at the late rates. Cassia buds steady, at 44s. to 47s. per cwt. China cablegrams report the article as scarce and difficult to buy. Cloves: Privately the market has continued to decline, and sales are reported of Zanzibar at 4½d. to 4¾d. for delivery February to June. On the spot the market is also quite depressed, with sales of good fair Zanzibar at 4½d.; dark Penang at 6¾d. Ginger: The first arrival of the new Cochin crop was offered for sale this week, and brought very full prices; fair medium to bold scraped, 29s. to 40s.; small ditto, 24s. 9d.; fair bold rough, 25s.; old crop common lined, 16s. to 16s. 6d. New Jamaica ginger also sold well; ordinary lean scraped at 75s. to 79s. per cwt. Mace rather firmer, though not notably dearer; fair pale Penang, 2s. 9d.; good wild Bombay, 11½d. to 11¾d. Nutmegs: Steady, and the demand for small sizes is still increasing, these being comparatively high prices. Black pepper: cheaper both on the spot and for arrival; Singapore, Jan.-March shipment sold at 5½d. to 5¾d. Spot fair Trang without reserve 5½d., good Lampung 5d. per lb. White pepper: also easier all round. Singapore, Jan.-April shipment, 9¾d. to 9½d. sold. At auction fair dull brought 9¾d. to 9½d., and Siam, fair quality, 9½d. to 9¾d. Sago: quiet, good to fine, 14s. to 17s. 6d.; 1,300 bags damaged grey flour sold at 6s. 9d. to 8s. per cwt. Tapioca: steady for flake, good Singapore from 1¾d. to 1½d.; Pearl flat, and 6d. lower for medium; fair to good fair, 16s. 6d. to 17s. Pimento: quiet and unchanged in price.

**STROPHANTUS.**—Green seed is said to be quoted lower in some quarters, in fact quotations are given at less than half the price named in our last report, but these seem to emanate from purely speculative bear quarters only.

**TEA.**—China market. Congous are selling at about previous quotations with no change worth noting. Commonest grades fetch 4d. to 4½d., while fair teas, free from any suspicion of common, may be had from 4½d. to 5d. per lb. Souchongs continue to be cheap, commonest selling on Wednesday as low as 4½d. Scented teas are unaltered, with some very useful teas selling between 7d. and 8½d. Assams are quiet, with a weak tone for the lower grades. Fair Pekoe Souchong may be had here and there at 7d. per lb., and useful Pekoes with fair leaf at 8½d. There have been more 10d. to 1s. Pekoes offering, and a number of capital teas with good appearance and powerful liquor have passed the hammer at this range. Broken Pekoes continue cheap, some very handsome tippy teas with good liquor selling from 11d. to 1s. 1d. There is, however, a great and increasing scarcity of Pekoes, really worth 1s. 4d. to 1s. 8d. Ceylons are again easier, fair Pekoe Souchong selling at 9½d. and really fine quality teas at 10d., to 10½d. Broken Pekoes remain cheap in sympathy with Indians, and teas with style and liquor, at 11½d. to 1s., are worth attention.

**THYMOL.**—Prices have been suddenly advanced by some makers, who, from 11s. 3d. to 11s. 6d., which was the last quotation, have increased their quotation to 12s. to 12s. 6d. Other distillers, however, still hold at the old prices.

**TONQUIN BEANS.**—Higher prices are quoted from New York, viz., 6s. 6d. to 7s. per lb. c.i.f. for *Angosturas*. There is no stock of *Pará* beans in that market.

**TURMERIC.**—The market here is very firm indeed, and a rather important business has been transacted at 11s. 6d. to 11s. 9d. per cwt. for good Madras finger, and 10s. for ditto bulb.

**VERATRINE.**—Messrs. Böhringer & Sons state that the new crop of *Sabadilla* seeds is reported to be a partial failure and very small, barely 300 bales being left for export. From 33s. 6d. the price has jumped up to 44s. Veratrine, however, is still quoted at the old price of 30s. to 32s. per lb.

## THE GERMAN MARKETS.

HAMBURG, February 11.

THE improvement which generally commences with the first months of the new year has not yet set in, and business in the drug and chemical markets remains dull and without animation. The changes are not very numerous. Balsam copaiba, camphor, and jalap have improved again, and menthol, star anise, and cassia oils are steady, but calumba, Curaçao orange peel, matico, and condurango are selling at very low rates.

The prices in this column are given in marks (11¾d.) per 100 kilos. or per kilo. (1 kilo. = 2 lb. 3½ oz.; 50 kilos. = 1 cwt.).

**ANTIMONY (CRUDE JAPAN).**—The demand has been rather slower and prices are a little easier here: 100m. to 102½m. is now required.

**BALSAMS.**—Copaiba: No stocks are left in importers' hands, and holders are showing great firmness; for Maracaibo and Angostura 5.75m. to 5.90m.; for Babia 5.50m. is quoted. Peruvian is also said to be more active, though prices are unchanged, i.e. very low. A genuine quality can be had at 7½m. to 8m.

**CAMPHOR (REFINED).**—The consumers have bought large quantities during the last week, and American orders are also in the market. Holders now asking 3.62½m.

**COPPER (SULPHATE).**—The market is very firm, and prices have much advanced, especially for spot stuff. It is said that in July prices will be higher again, as high, in fact, as in 1889 at the corresponding time. The German makers have sold their whole production for the summer, and the second hand will not sell, knowing the favourable situation of the article.

**GUM ELEMI** remains dear and scarce; for good pale Manila 120m. is asked, but small lots are on the way.

## THE DUTCH MARKET.

AMSTERDAM, February 12.

**CINCHONA.**—The bark sales in Amsterdam on February 20 will consist of 2,000 bales and 88 cases, or about 168 tons. Java bark, from Government plantations, 365 bales, 55 cases, or about 35 tons; ditto from private plantations, 1,591 bales, 33 cases, or about 130 tons. British Indian bark: Forty-four bales, weighing 3 tons. The bark is divided as follows:—Druggists' bark: Succirubra quills, 67 cases; broken quills and chips, 204 bales; root, 45 bales; Schubkrafft quills, 14 cases; broken quills and chips, 26 bales; root, 15 bales; lancifolia quills, 7 cases. Manufacturers' bark: Officinalis quills, broken quills and chips, 33 bales; root, 2 bales; Ledgeriana quills, broken quills and chips, 1,292 bales; root, 269 bales; Hybrid quills, broken quills and chips, 66 bales; root, 4 bales. The manufacturers' bark contains about 180,000 oz. sulphate of quinine, or an average of 4 per cent. About 10 tons contain 1.2 per cent. sulphate of quinine; 26, 2.3; 37, 3.4; 48, 4.5; 7, 5.6; 1, 6.7; 6, 7.8; 1, 8.9 per cent.





### Memoranda for Correspondents.

*Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.*

*Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.*

*If you send us newspapers, please mark what you wish us to read.*

*Ask us anything of pharmaceutical interest: we shall do our best to reply.*

*Before writing for formulæ consult the last volume, if you have it.*

*Letters, queries, &c. will be attended to in the order received.*

### The New Pharmacy Bill.

SIR,—The report of the discussion which took place at the Council meeting on February 5 relative to the draft of the proposed new Pharmacy Bill appears to me to afford abundant evidence that we have arrived at an acute stage in the politics of pharmacy; and I want to urge all my brethren of the craft, and especially those who are proprietors of small or only moderate-sized establishments, to read the draft of the Bill very carefully, and also to study your report of the discussion in Council thereon (*vide THE CHEMIST AND DRUGGIST*, February 8).

The clauses of the Bill which are intended to enable the Council to enforce a curriculum upon all who desire to enter the trade or profession of a chemist and druggist I emphatically disapprove of, holding that the present Minor examination is a sufficient safeguard in the public interest, and that any further "seals of merit" or "marks of distinction" should be obtained simply as the reward of honourable voluntary effort.

Now I come to the sixth clause of the drafted Bill. In my opinion this affects the vital interests and liberty of by far the larger number of chemists in the country. It is my belief that, if this Bill becomes law, every chemist who shall allow an assistant or apprentice who has not passed the Minor examination (and therefore 21 years of age) to dispense the simplest prescription or to sell one pennyworth of, say, paregoric elixir, will be a law-breaker, and lay himself open to the penalties of the seventh clause.

Only three members of the Council—Messrs. Evans, Schacht, and Abraham—stood out for the liberties of their humbler brethren. All honour to them! The President's replies to Mr. Schacht appear to me most unsatisfactory, and look like special pleading for the other side.

In conclusion, I would say to all those who view the matter in a similar light, Throw off all apathy, and let us do whatever we can at the coming election of the Council to weaken the hands of those who would bind us with fresh chains. And, further, it will be needful for all who object to the Bill (either singly or collectively) to petition Parliament against the passing of the Act.

Yours respectfully,

Harrogate, February 12.

FRESHFIELD REYNOLDS.

*Derby* (244/35) calls attention to the same point, and indicates with much elaboration, but with too little regard for our space, the difficulties in which it would land the small chemists. He approves of the rest of the Bill, but urges chemists "to oppose it tooth and nail," unless the clause objected to be struck out.

*Lex* (241/56) complains of the Bill because it does not provide for the exemption of unqualified managers of branch shops, who have been such for seven or ten years. But unqualified managers are not specially threatened by this Bill. Then he mixes up the Bills of 1888 and 1889; says the latter was defeated by the opposition of the unqualified managers. So far as we are aware, they only moved in reference to the Bill of 1888 when they were expressly concerned. If "*Lex*" means that a special clause should be inserted in the Bill to

give unqualified managers exceptional privileges if only they have kept themselves unqualified for the period he names, his aim is so romantic that it seems hardly worth pressing. At any rate we must ask him to familiarise himself with the history of the question before we print a long letter on the subject.

*Vernet* (242/70) regrets that a clause granting exemption from jury service to all chemists has not been inserted in the Bill.

### Reform of the Pharmaceutical Society.

SIR,—Your correspondent Mr. Alfred Coleman writes in a wild manner about the reorganisation of "this decaying society." How easy it is for the merest tyro thus to express himself, and how very natural it is for those deficient either in early training, practical experience, properly directed energy, or brain power to attribute the cause of their disappointed ambitions to the Council of the Pharmaceutical Society! How much more difficult it is for such individuals to suggest a remedy for the evils which do admittedly exist! Mr. Alfred Coleman does not venture to explain the "sweeping reforms" which he and his friends would wish put into force. It may be clever thus to disarm his critics, but it scarcely assists in solving our difficulties.

I should like him to read Mr. Carteighe's able and broad-minded speech in moving the adoption of the reports at the last council meeting, and then say whether he considers it possible, and if so how, to get more "sweeping reforms" passed into law.

Few, if any, men would devote the amount of time and energy to the work of the society that Mr. Carteighe does, and very few in our ranks possess the ability to enable them to do so. I wonder that Mr. Carteighe does not wash his hands of the society's work altogether. His position in the scientific world is so well assured that it would not suffer thereby; and his only reason for sticking to his post must be that his heart and soul are wrapped up in the welfare and progress of pharmacy.

I sincerely trust that there are but few sensible men among pharmacists who will be led away by such unintelligible assertions as have been made by your correspondent.

54 Piccadilly, London,

Faithfully yours,

February 12.

H. H. MILLHOUSE.

SIR,—In my letter which you kindly inserted in your valuable journal last week I expressed my intention (with your permission) of stating on another occasion some of the requirements in my opinion necessary to build up a truly representative, satisfactory, and progressive Society; and it is very gratifying to me to find that the new draft Pharmacy Bill embodies some of the proposals which I advocate.

But I quite agree with your editorial that the new Bill is "utterly inadequate in its expression of the legitimate wants and needs of the trade." What, however, could be expected from a Council composed to a large extent of men who have in the past neglected so sadly one of the principal objects of the establishment of the Society—namely, the protection of those who carry on the business of chemists and druggists? Has this ever been their policy? What have we been protected in? Why should it be necessary on their part at this eleventh hour, in deference to trade opinion, and for fear of losing their seats, in great trepidation, and with much anxiety lest their favourite measure should be imperilled, to tack on to their Curriculum Bill a clause to confine the dispensing of medical prescriptions to duly qualified chemists? Ought we not to have had this sole privilege for twenty or thirty years past, if only the Council had done their duty?

Then again in regard to the provision for restricting the sale of patent medicines containing poisons to chemists, which the President said "he would it were possible to add." I ask, why did not the Council bestir themselves to obtain for chemists the sole privilege of selling all patent medicines before supply stores or grocers had any interest or right in the matter? Can we trust the present Council to do justice to these matters in the future? I fear not—at least, as at present constituted.

I am thankful for the clause in the draft Bill for the en-



largement of the Society by opening its portals to all chemists in business as members upon equal terms; but I should much prefer it to go farther, and take in every legally qualified man upon payment of his subscription, which latter should be reduced to 10s. 6d., as an inducement for all at present outside to come in and join hands for the general good; and this reduction would no doubt be rendered peculiarly practicable by the very largely increased membership fees.

It seems to my mind to be also a mistake to perpetuate the foolish and troublesome policy of limiting the number of chemist and druggist members in proportion to pharmaceutical chemist members upon the Council, which tends to keep the Society in the hands of a caucus, and hinders it from becoming fully and fairly representative.

And, in conclusion, given a large and united Society, framed upon a truly representative basis, can we not take it for granted that measures of trade protection and useful reforms could be easily obtained as required to create and secure a continuance of security and peaceful prosperity?

I am, yours faithfully,

65 St. Mary St., Cardiff.

ALFRED COLEMAN, Ph.C.

#### Mr. Wellcome Explains.

SIR,—On page 175 of your issue, February 8, you quote a newspaper paragraph which contains several errors, and which will, I fear, convey a wrong impression to my friends who read your valued journal. The letter referred to was not written for publication, but was intended for the Masonic Lodge room only, and to serve as a record; however, as the letter has been printed in full in many journals, I will now ask you to reproduce it in order to correct the paragraph which states that my letter conveying the notes was "decidedly sensational," &c. :—

Snow Hill Buildings, London, E.C.  
February 3, 1890.

My dear Bro. Paige,

Enclosed please find Bank of England notes, No. 88—w 48504, for 20l., and No. 2—x 62447, for 5l. These notes were stolen from our late Bro. Archibald McNeill by, I believe, the same cruel hand that caused his death. After the numbers had been published and negotiation thus rendered impossible, they were sent to the French authorities at Boulogne, enclosed in an anonymous letter, intended to divert suspicion from the real criminals. The stains and mutilations in these notes are evidently caused by the culprit concealing them in his boot and carrying them thus hidden for a considerable time. I acquired the notes by purchase, for the purposes of the investigation, and now, being no longer required in this connection, I have considered how they should be disposed of. I feel that they are far too sacred for me to deal with or use as my personal property, and have therefore decided to give them to our Savage Club Lodge Benevolent Fund, to be regarded as coming from our late brother rather than from myself. McNeill's large heartedness is well known to all, and that he would part with his last penny to help a brother in need. It seems, therefore, to me, that this money, which was the last in his possession, could not be applied in a manner that would have been more gratifying to him than that it should go into the benevolent fund of the lodge to which he was so devotedly attached, and of which he was one of the founders and the first secretary, a position he held at the time of his death.

To Bro. John Paige,

Secretary Savage Club Lodge, London.

I beg to remain, yours fraternally,

HENRY S. WELLCOME.

I do not, as a rule, believe in correcting statements made in newspaper paragraphs, but I trust you will pardon my sensitiveness in this instance. Yours very truly,

Snow Hill Buildings,

HENRY S. WELLCOME.

London, E.C., February 10.

#### The Rent.

SIR,—It may be of interest to some, perhaps to many, of your readers to know of the "Tenant Tradesmen's National Union," which is now engaged in the good work of opposing the exactions of unjust landlords. There has been a discussion in the columns of THE CHEMIST AND DRUGGIST with reference to right of landlords to confiscate goodwill and fixtures and improvements of the tenant upon expiry of lease; and as your readers are as liable to suffer by such losses as other tradesmen, I think some of my brother-chemists may be glad to know of this new union, and perhaps to avail themselves of its advantages.

The objects are briefly as follows:—(1) To oppose generally the exactions of unjust landlords; (2) to secure the

tenant tradesman the value, &c.; (3, 4, 5, &c.) as per programme. Any chemists who wish to join the union may send their subscriptions to the Hon. President, James Haysman, Esq., F.R.G.S. The annual membership fee is 2s. 6d.

Yours truly,

S. M. BURROUGHS,

Member of Executive Committee.

#### Regulating Prices—Home Trade.

SIR,—Noticing in a reprint of an "interviewer's" report of a conversation with Mr. Barratt, of Messrs. Pears', that Mr. Barrett expressed the opinion that firms who attempted to regulate prices were either "knaves or fools," we think it may not be out of place if we offer some remarks upon our own efforts in this direction, especially as we have now had nine months' experience of the ups and downs of such a movement.

Starting with the opinion that there was some justification for the universal complaint of the condition of the patent trade, in the wholesale and retail branches of it, and that it was to the real interest of the manufacturer that the distributors of his goods should have some remuneration for their services, and also being of opinion that it would be better for the public to pay directly for these services rather than indirectly, we formulated the scheme to regulate prices which has evolved itself into its present form, and which is shortly this—no wholesaler may undersell a competitor, nor may he supply a retailer without securing an agreement not to sell below certain minimum prices.

We have so far succeeded in securing uniformity of prices by wholesalers, that we have had only one complaint of a wholesaler underselling, and this has not yet been substantiated; when it is we shall close that wholesaler's account; but with regard to the retailers, although we have not yet been so successful, we have secured for them, as a body, more profit upon our goods than they would have made in the same time had we not moved in the matter; and with regard to ourselves, we invite Mr. Barratt to inspect our last year's summary of sales. So much for "knaves and fools."

We have acknowledged that our scheme is not yet a complete success, but we are at this moment more hopeful than ever of making it so, as almost every other day some firm writes to say that they would like to comply with our terms if their competitors would, and in many instances we are successful in arranging this, the majority being about tired of cost-price trading.

As we ourselves supply no one who will not sign, and require all wholesalers to do likewise, extreme cutting cannot take place except by a wholesaler or retailer acting dishonourably (and this of course a large majority of both will not do), for cutting our goods below the minimum prices now means either that a wholesaler is evading his engagement or the cutter is doing so. When we are informed that a dealer is selling under the minimum price, and it can be proved that the wholesale supplier has not secured an agreement, we will at once close the latter's account; and having recently had indications that it will be less difficult in the future than in the past to secure the necessary evidence, we do not consider the difficulties of obtaining it to be insuperable. The retailers who sign and break faith we expect to reach by issuing monthly a black list, which will eventually make it difficult for them to obtain supplies. Hearsay evidence is of no value, and all interested are cautioned against paying attention to it.

We may remark to those who, now less numerous than six months ago, consider our scheme unwarrantable, that the demand being our property, created at our expense, it is our right to see that this demand is satisfied in accordance with what we consider to be best for our interests—if we make unwise regulations, that is our look-out; also that those who object have their remedy. Our terms are stated prior to the purchase, and it is optional to the purchaser to accept the goods upon these terms or go without them.

Yours truly,

ELLIMAN, SONS & Co.

#### Administration of Nitrous Oxide Gas.

SIR,—I desire to thank "Attraction" for his interesting letter on tooth extraction in your issue of to-day. Since



dinner I have administered N O gas to three patients and extracted painlessly twelve teeth and stumps. In each case the patient stated that she felt no pain at all. I give the gas almost daily, and yet I have heard of no bad after-effects. In very few cases have I found complete insensibility to last longer than half a minute after taking off the face-piece. I never attempt to give the gas alone, but always have someone to turn the gas on and off.

I use a U-shaped steel spring gag, and sometimes a cork, if the gag does not fit, and always tie it with twine to the chair, for fear of it slipping in the mouth. As I had never seen gas administered, except personally once on myself, I received all my instructions, &c., from Dr. Silk's valuable work on the subject.

A very important point to bear in mind is never to be engaged in extracting a tooth as the patient is recovering consciousness. This is a horrible sensation to the patient, and almost as bad as commencing before insensibility has supervened. Frequent are the complaints I have heard from patients on this score who have been elsewhere. Another important matter, to prevent sickness from the blood flowing down the throat, is to bring the patient well forward in the chair as soon as the tooth has been extracted.

Only last week the best medical practitioner here let me extract one of his lower bicuspid with the gas. He brought with him another M.D. to witness the operation, and both expressed themselves highly pleased with the way in which it was done. This case was one of many in which the patient had previously had gas administered often, and had always felt the tooth extracted. Last thing, before I put on the face-piece, the doctor said, "Be sure and give me plenty, for I invariably feel the pain." As I had another M.D. turning the handle and ready for any emergency, I thought this an excellent opportunity to try the effect of a really good dose of the gas. The result was that no pain was felt at all, and the patient insisted on giving me a double fee. I may say that I never feel the pulse, but I attentively watch the changes in the face. Also the stertorous breathing is a good guide, but not in all cases. At any time I shall be glad to furnish any little details to beginners.

I should like very much if any of your numerous readers could give any information on the subject of what constitutes the general charge for administering gas in small towns. A L.D.S. in the neighbourhood charges 2s. 6d., and 1s. each per tooth extracted during the operation. I follow suit, yet I think 2s. 6d. too little for giving the gas. I should like if anyone would give the prices obtained for stoppings, scaling, &c., also which dental chair is a fairly good one and yet can be purchased at a reasonable figure; which dental engine is the best.

Yours, &c.,  
W. P.

SIR,—Some months ago I wrote a somewhat lengthy letter on the above subject, and promised to communicate my investigations into the comparative value of NO gas and the hypodermic injection of cocaine. "Heder's" letter of last week on this subject reminds me of the former correspondence, and I find that he never contemplates administering the gas on his own responsibility, but only in the presence, and by the aid, of a surgeon. This, of course, doubles the expense, and makes the matter almost prohibitive. I think, if "Heder" is a dentist, he might venture to administer alone, save in cases of evident debility; but this statement will evoke difference of opinion.

Providing myself with a Maw's syringe, I proceeded to try  $\frac{1}{2}$  gr. of sol. cocaine, injecting on each side of the first superior molar, insinuating the needle well up the alveolar, and waiting nearly two minutes between each administration; but I must confess to failure in all the cases I tried: either the solution returned or the patient found the pain of the needle almost as great as the extraction, or cocaine "forgot its power to charm." I was glad to return to the N O with all speed—in which failure is almost unknown. It needs to be carried to the "stertorous stage" to ensure success. When the mask is removed reaction sets in with great rapidity, consciousness often being contemporaneous in its return with the extraction of the tooth. I have never found the tooth escape the forceps—a more real and trying *contre-*

*temps* is the injury of the lower lip through pressure of the rough handle in extracting a tough upper.

I know that several who have written are successful with cocaine, but confess some records of the alkaloid are alarming; so that we may really conclude that gas is the safer of the two. I can only wish I had more opportunity of administering it, and of its attendant fees.

Yours truly,

February 11.

FIDES. (244/24.)

#### Lin. Saponis Co.

From our report of the last meeting of the Edinburgh Chemists' Assistants' Association it will be seen that Mr. John Findlay gives lin. saponis co. as a synonym for lin. opii. Against this *Exoniensis* (243/63) sends the following historical tracing:—

Linimentum saponaceum, P.L. 1745.
" saponis, P.L. 1788.
" saponis comp., P.L. 1809.
" " " P.L. 1824.
" saponis, P.L. 1836.
" " P.L. 1850.
" " B.P. 1863.
" " B.P. 1867.
" " B.P. 1885.

Forty years' experience, which "*Exoniensis*" has had in the West of England and elsewhere, has always been in favour of the above, when lin. saponis co. is ordered.

#### That Ball of Quinine.

SIR,—Messrs. G. J. Thomas and C. A. Serre do not quite believe in the phenomenon of the quinine mixture. "Pharmacy" also offers a method of mixing the ammoniated tincture and water.

My customer asked for 2 oz. of the tincture to be put into an 8-oz. bottle. This he had, took it home, and filled up the bottle with water. Then, I presume, he shook the mixture vigorously, and produced a "ball of quinine" floating in his 8-oz. bottle. His newspaper cutting had cautioned him "to see that he got the right thing." Having churned the alkaloid into a globular form he felt convinced that he had not the right thing. *Voilà tout.*

Yours truly,

HEDER. (243/61.)

#### MISCELLANEOUS INQUIRIES.

A large number of correspondents ask us for formulæ and other information already published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

Correspondents who have made inquiries regarding the following subjects will find the information in the numbers indicated.

239/73. *Sheepskin*.—Receipt for Liquid Sheep-dip.—See June 1, 1889.

238/49. *M. S.*—Insecticide for Plants.—See June 22, 1889, page 854, and June 29, page 894.

239/5. *H. J. T.*—Pick-me-up.—August 17, 1889, page 256; also in almost every back volume.

240/37. *Alpha*.—Chillie Paste.—December 22, 1888, page 868.

240/63. *B. R. G.*—Quinine Hair Wash.—April 13, 1889, page 527.

242/13. *W. S.*—Custard Powder.—See THE CHEMISTS' AND DRUGGISTS' DIARY, 1889.

235/21. *A. B. C.*—We have frequently given such information.



233/33. *Q. C.*—The preparation does not appear to be one which can be prevented from fermenting. *Ipecacuanha* wine we regard as the objectionable ingredient more than the *tragacanth*. You might try, instead of the *ipeacacuanha* wine, a proof spirit tincture, and instead of the *tragacanth*, mucilage of Irish moss.

233/44. *F. W. B.*—You will find some account of the process for turning bones into manure in Spon's "Encyclopædia."

235/13. *A. P. S.*—We understand that wholesale houses make their *Liquor Opi Sedativus* of the same strength as the liquid extract of the *British Pharmacopœia*. We published an excellent formula in our 1889 *DIARY*, page 273, the strength being 2 oz. of opium to the pint.

236/2. *Ancient Citizen*.—The *Red Billiard Ball*.—To colour the ball immerse for ten or twenty minutes in dilute nitric acid (1 in 30), wash with cold water, and boil for half an hour in a pint of water containing 100 grains of cochineal and the same of stannous chloride; then add a few grains of tartaric acid, boil for ten minutes longer, remove, and polish with olive oil.

235/5. *Cetaceum*.—Several formulæ have been given in our columns this year.

238/9. *Assistant*.—See reply to "A. P. S."

236/50. *Calculus*.—The addresses which you require are Mr. Reginald Harrison, 6 Lower Berkeley Street, Portman Square, W., and Mr. Furneaux Jordan, Selly Hill, Birmingham.

236/56. *P. M. R.*—Old *Essence of Lemon* is purified by shaking it with its own volume of solution of potassium permanganate (30 grains to 1 pint), allowing to stand for a few hours, then washing with water.

237/5. *Doubtful*.—You will find the matter fully explained on page 13 of "The Art of Dispensing." 3j. undoubtedly means 480 grains, and 1 oz. 437½ grains.

237/27. *F. B.*—*Liquor Ammonii Anisatus*, P.G.—Oil of anise, 1 part; rectified spirit, 24 parts; solution of ammonia, 5 parts (all by weight). Mix.

237/29. *Thomas*.—British Brandy:—

Bitter almonds	..	..	..	..	1 lb.
Powdered mace	..	..	..	..	1 oz.
Orris root	..	..	..	..	1 "
Cassia buds	..	..	..	..	2 "
Prunes	..	..	..	..	3 lbs.
Powdered catechu	..	..	..	..	2 oz.
Spirit of nitrous ether	..	..	..	..	5 "
Brandy colouring	..	..	..	..	5 "
Proof spirit	..	..	..	..	20 gallons

Beat the prunes with their stones into a paste, adding the almonds, cassia buds, and other solids, using, if necessary, a little spirit. When a uniform paste has been formed, add it to the liquids, and stir all well together. Allow this to remain at rest for a few days, after which time it must be stirred up every morning for a month, when it may be filtered.

There is another formula in Grey's "Supplement."

238/1. *M. & P.*—(1) *Liquor Bismuthi*.—Some samples of bismuth citrate do not give a perfectly water-white solution, but the colour in most cases comes from a dirty mortar. The liquor can be made absolutely water-white by the process described in *THE CHEMIST AND DRUGGIST*, January, 1886, page 17. Solution of bismuth will not keep without a slight

excess of ammonia and about 10 per cent. of spirit. An excess of ammonium citrate is also an advantage. (2) The formulary with additions is now published.

238/2. *A. B. R.*—It is not safe to put up powders for children of all ages, two of which would be suitable for an adult. We cannot for that reason venture to give a formula. The best thing you can do is to encourage the sale of compound liquorice powder.

238/17. *Sigma*.—See the list on page 159 of the *DIARY*, and judge from the reputation of the members of the staffs which is the best.

238/20. *Phenacetin*.—*Children's Diseases*.—Popular works on this subject:—Chavasse's "Advice to a Mother" (Churchill, 2s. 6d.); also by the same publishers, "Suggestions to Mothers on the Management of their Children." Begbie's "Medical Information and Advice" includes most children's diseases, as well as those of adults (Nelson, 2s. 6d.).

238/36. *Ovum*.—We have found turmeric in *Egg Powder*, and presume that that is the colouring matter generally used.

238/50. *J. S. A.*—We gave a formula in our issue of January 18, page 89.

238/51. *R. N. Clifford*.—*Oil of Exeter* was originally a very complex affair, but green oil of elder is now generally given for it. Redwood gives the following simplified formula:—

Euphorbium	..	..	..	..	1 oz.
Mustard	..	..	..	..	1 "
Castor	..	..	..	..	1 "
Pellitory	..	..	..	..	1 "
Green oil of elder	..	..	..	..	16 lbs.

Bruise the solids, and digest in the oil for a week; then strain.

*Oil of St. John's Wort* was doubtless made by digesting the fresh plant in olive oil, but we cannot lay our hands on a formula for it at present.

238/58. *J. R. Marten*.—"Hints on Nursing," by Mena Drew (Forder, Stonecutter Street, E.C., 6d.).

#### Information Wanted.

[Replies to the following requests are solicited by correspondents of *THE CHEMIST AND DRUGGIST*.]

236/54. Publishers of books of questions in botany and organic chemistry.

238/1. How is calendulated boric acid made?

242/13. Terra-cotta honey-jars. Where obtainable?

239/73. The addresses of large dealers of nitrate of soda.

#### Information Supplied.

Answer to "X. Y. Z." (233/54).—*Liquor Hamamelis* is probably "Hazeline," which is liq. ham. *destil.*—SM.

*Chromic Acid Batteries*.—In your reply (230/71) to "Somerset" you state that the solution of  $K_2Cr_2O_7 + H_2SO_4$  is called chromic acid. This is not correct. Chromic acid itself is used for batteries, its superiority over the acidulated bichromate being its more ready solubility, and the fact that its solution does not deposit crystals of chrome alum, which so interferes with the employment of the bichromate. There is no other benefit in its use. The same E.M.F. is obtained, provided the percentage of  $CrO_3$  is the same in each case.—SM.



# PALATABLE TONIC LAXATIVE.

## FERRIS & CO.'S PATENT

# CASCARA

Prepared with the finest sweetened Eating Chocolate, the proportion of the active ingredient being carefully adjusted so that each Tablet or Bonbon contains a dose equivalent to twenty minims of the Fluid Extract of Cascara. The

Tablets are of such a form that they can be easily divided, should a smaller dose be desired; and *the taste can hardly be distinguished from that of ordinary Chocolate.*

Feb. 8, 1889.

"Your tasteless liquid extract of Cascara Sagrada and the Bonbons have given me great satisfaction. A little patient greatly appreciates the Bonbons."

—, M.R.C.S.

To Messrs. FERRIS & Co.

In habitual or chronic Constipation. Invaluable for children, ladies, and invalids. No nauseous bitter taste. By far the most agreeable form of administering Cascara Sagrada yet introduced.

In Boxes, 1s. 9d. each; 18s. per dozen.

Sole Manufacturers and Patentees, FERRIS & CO., BRISTOL.

# CHOCOLATE

# BONBONS.

Feb. 13, 1889.

"DEAR SIRS,—Please send me a dozen boxes of your Cascara Bonbons. They are a very pleasant way of taking a valuable and nauseous medicine, and they answer their purpose admirably."

—, L.R.C.P., M.R.C.S.

Messrs. FERRIS.

# THE KING OF HOLLAND

IS

## HIGHLY PLEASED WITH

# VAN HOUTEN'S COCOA

AND

Has Granted the Firm (unsolicited)

The right of styling their Works the

# ROYAL COCOA FACTORY

(By Deed of August 12, 1889).



NEW SOUTH WALES

# THE AUSTRALIAN DRUG CO., LIM.,

## LATE E. PROSSER & CO.,

IMPORTERS OF PATENT MEDICINES, DRUGGISTS'  
SUNDRIES, DYE GOODS,  
SURGICAL INSTRUMENTS, PERFUMERY,  
FANCY SOAPS, SPONGES.



IMPORTERS OF BRUSHWARE, CORDIAL MAKERS,  
MACHINERY, CORKS, BOTTLES, LABELS,  
PHOTOGRAPHIC CHEMICALS AND MATERIALS.

**Wholesale Druggists, 19 & 21 O'Connell Street, SYDNEY.**

*Agencies for Patent Medicines and other Goods solicited. Travellers cover New South Wales and Queensland.*

London Agents: LAUGHLAND, MACKAY & BAKER, 50 Lime Street, E.C.

NEW SOUTH WALES.

# W. H. SOUL & Co.



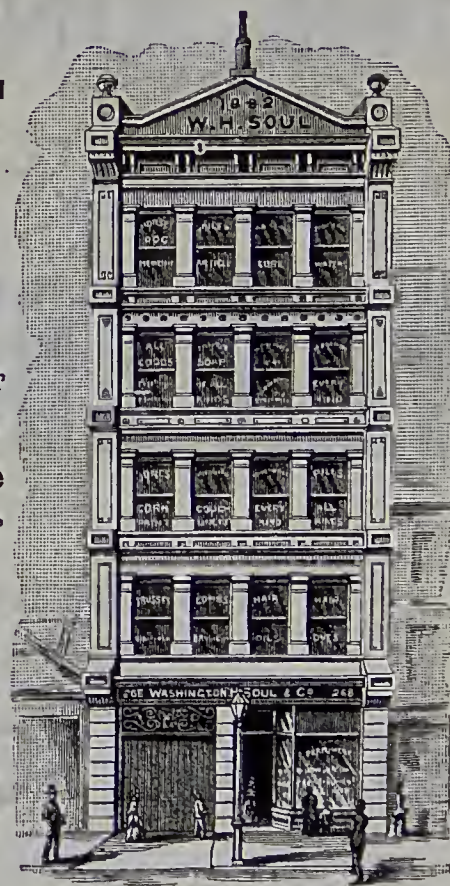
7 DOORS FROM KING STREET.  
32

Nos. 158, 160, 162, & 268  
PITT STREET,  
SYDNEY, N.S.W.

Will be pleased to  
fill any lines from their  
large Stock, which the  
Trade may be unable  
to obtain from their  
usual Jobbers.

**TERMS CASH.**

W. H. S. & Co. can arrange  
with pushing Houses to receive  
Goods on Commission for  
prompt Sale in this Colony.



4 DOORS FROM PARK STREET





ESTABLISHED 1870

# PROSSER, TAYLOR & CO.

(LATE BERKLEY, TAYLOR & CO.),

WHOLESALE DRUGGISTS AND IMPORTERS,  
AND  
MANUFACTURING CHEMISTS  
BRISBANE, QUEENSLAND.

CONTRACTORS TO THE QUEENSLAND GOVERNMENT.

Importers of Drugs, Chemicals, and Druggists' Sundries, Patent Medicines and Perfumery; Surgical Instruments, Photographic Sundries, Confectioners' and Dyers' Goods, Dental Sundries, Soda Water Machinery, Bottling Racks, Egg-shape and Lamont's Soda Water Bottles, Corks, Essences, Labels, and all Cordial Makers' Requirements.

*All parts of Queensland visited at regular intervals by experienced Travellers.*  
Agencies solicited from Firms who are prepared to actively introduce their Manufactures into the Colony.

LONDON AGENTS—

MESSRS. LAUGHLAND, MACKAY & BAKER, 50 LIME STREET, E.C.



HALF A CENTURY OF SUCCESS  
THE ONLY GENUINE MINT ALCOHOL IS  
**DE RICQLES'**  
MINT ALCOHOL.

Recommended by the highest Medical Authorities for Indigestion, Stomach Ache, Heartburn, and Headache. It dispels immediately all uncomfortable feeling. Indispensable during the hot weather. An excellent article for the Toilet and Teeth. A grand Preservative during periods of Epidemics.  
53 AWARDS, of which 15 are Diplomas of Honour & 14 Gold Medals.  
DEPOTS EVERYWHERE.

Manufactory at Lyons (France), 9 Cours d'Herbouville  
PARIS, 41 rue Richer.  
Insist on the name De Ricqlès.

**GUSTAVE CHANTEAUD,**  
64 RUE DE TURENNE, PARIS.  
FACTORY AT VENDOME.

**GUSTAVE CHANTEAUD'S SEIDLITZ.**  
Granulated, effervescent.  
In cases containing 100 bottles .. .. . £5  
DOSIMETRIC GRANULES, in boxes of 10 tubes.  
SOLUBLE "LENTILLES" (Lentil-shaped pastilles),  
for Hypodermic Injection.

Gustave Chanteaud's special syringe for using the Soluble "Lentilles."

Triturated "Lentilles" for administration by the mouth.  
Antiseptic "Lentilles" for external use.

General Prices Current and conditions of sale furnished on application.

INDIA.

**PEAKE, ALLEN & CO.**  
CHEMISTS, DRUGGISTS,  
AND  
GENERAL MERCHANTS,  
LUCKNOW, OUDH, INDIA,

Possess exceptional facilities for the introduction of NEW SPECIALITIES, Patent Medicines, Druggists' Sundries, Perfumery, &c.

MANUFACTURERS  
OF  
GOODS ADAPTED TO THE DRUG TRADE  
ARE OFFERED  
Special facilities for the Sale of  
such in the United States  
BY

**E. C. RICH CO., Ltd.**  
167 Chambers Street, 201 State Street,  
NEW YORK, U.S.A. BOSTON, U.S.A.

Satisfactory references. Correspondence solicited.  
34

UNITED STATES.

**B. KEITH & CO.,**  
MANUFACTURERS OF  
**PURE CONCENTRATED  
MEDICINES,**  
CONCENTRATED TINCTURES, ETC.

We make a full line of RESINOIDS, such as PODOPHYLLIN, LEPTANDRIN, EUONYMIN, IRISIN, HYDRASTIN, &c., ALL PURE.

So-called Concentrations are in the market, called by the same name a manufactures, that are made by triturating extracts etc., with sugar of milk, powdered root, etc

**WHAT ARE CONCENTRATED TINCTURES?**

They are not made from the crude material, but by dissolving the active principles in Alcohol in definite proportions, and invariably represent a uniform amount of therapeutic power.

Send for printed matter on CONCENTRATED TINCTURE OF AVENA SATIVA in the Morphine or Opium Habit, and certificates from different members of the Medical Profession, citing cases under their charge, treated by it; also REVISED AND ENLARGED MANUAL; also Price Lists, to

**B. KEITH & CO.,**  
75 WILLIAM STREET NEW YORK, U.S.A.

**JULIUS LEVY,**  
WHOLESALE DRUGGIST & SUNDRYMAN,  
CHARLOTTE PLACE, SYDNEY.  
BRANCH—15 & 17 FLINDERS LANE, MELBOURNE

**AGENT FOR**

HEINRICH HAENSEL'S Olea ætherea sine terpeno.  
E. MERCK, Alkaloids and Glucosides.  
GUSTAV LOHSE, Lily of the Valley Perfumery.  
ROBERT FRÈRES, Triple Extraits.

Correspondence invited. Special facilities for introducing new lines.

**DURBAN, NATAL.**  
**THE NATAL DRUG CO., LD.**  
(Late Bentley & Vanderpump),  
WHOLESALE DRUGGISTS,  
IMPORTERS, AND MANUFACTURING CHEMISTS.

AGENCIES undertaken for the Sale of PROPRIETARY ARTICLES, and other Goods suited to the SOUTH AFRICAN MARKETS.

LONDON AGENTS:  
**DAVIS & SOPER,** Bury Street, St. Mary-Axe, LONDON.  
Telegraphic Address—"REPOSNO LONDON."  
**DURBAN, NATAL.**



VICTORIA.

# ROCKE, TOMPSITT & CO., WHOLESALE DRUGGISTS, MELBOURNE,

AND  
119 & 120 LONDON WALL, E.C.

Samples and Quotations solicited.

Agencies undertaken on the most advantageous terms.

Wholesale Depot for Sander &amp; Son's Pure Volatile Eucalyptus Oil (Eucalyptol), and Importers of Oil of Eucalyptus.

Wholesale Agents—Messrs. Hodgkinson, Prestons &amp; King, 81 Bishopsgate Street Without, E.C.

B. G. LENNON & CO., PORT ELIZABETH  
& EAST LONDON,  
LENNON & TEBB, CAPE TOWN,

## Wholesale Druggists & Druggists' Sundriesmen

LONDON OFFICE: B. G. LENNON &amp; CO., 14 BUNHILL ROW, E.C.

AGENCIES UNDERTAKEN.

# MENTHOL

Our Extra Steam Refined quality, is in firm, hard, dry and snowy white crystals, entirely free from oily contamination (and therefore of the highest melting point.) As the original and largest manufacturers in the world of the true Japan Menthel, we guarantee our brand to be absolutely pure. Beware of substitutes. For full particulars, therapeutic uses, etc. see special circulars to be had on application.

Our Extra Steam Refined Oil is treble distilled and twice rectified by steam, by an entirely new process and in apparatus of our own invention, by which all these polymeric products

# PEPPERMINT

of a tarry and resinous nature which are objected to by some consumers are extracted. It is of water white colour, retaining its full aroma, pungency and strength and guaranteed absolutely pure and soluble in spirits of wine.

Yokohama,  
Japan.COCKING & Co. Established  
1848.

Commission Merchants, Wholesale Druggists and Manufacturing Chemists.

OTHER SPECIALITIES.

Cod Liver, Fish and Orange Oils, Vegetable Wax and Isinglass.

Monthly Market Report and detail circulars on application.

LONDON AGENTS:—SPIES BROS &amp; Co., 106, Fenchurch Street.

Telegram Address—"COCKING YOKOHAMA."

# CAMPHOR

This is the genuine essential oil as produced in the

manufacture of the Solid Campher of Commerce. Our brand is guaranteed to be the natural oil and not the fictitious mixture of refuse Campher and Turpentine generally sold. Having made a special study of its manufacture we have succeeded in producing a colourless oil and entirely free from any smell. It is a remedy in Rheumatism, a good solvent of resins, and the most perfect article for the use of the essential oil distiller.

## FELTON, GRIMWADE & CO.,

### Wholesale Druggists and Manufacturing Chemists, MELBOURNE, VICTORIA.

LONDON AGENTS:—

Messrs. GRIMWADE, RIDLEY &amp; CO., Mildmay Chambers, 82 Bishopsgate Street

Wholesale Agents for Bosisto's Genuine Oil of Eucalyptus.



**WM. RADAMS'**  
**MICROBE KILLER**  
CURES CATARRH,  
GOUT,

**CONSUMPTION.**  
MICROBE in man is now  
accepted as the common origin  
of all human disease.  
(his twin brother) *BACILLUS*  
exceedingly minute or  
germs that exist  
in the liquids  
and tissues of  
the human  
body.

**And a Microbe Kills Hereby**  
accepted as the origin  
of the purest and most  
valuable of all  
as the Spring Water  
of the Universal  
Microbe Killer  
Dyspepsia, Indigestion.

**RHEUMATISM.**  
in destroyed  
Microbe and  
brother  
Bacil-  
lus.

**CANCER,**  
**BRIGHT'S DISEASE,**  
Of all first-class Chemists,  
OR  
**111, OXFORD ST., LONDON. W.**



All  
Wholesale  
Houses.

**PETER MOLLER**

43  
SNOW HILL  
E.C.

LONDON, CHRISTIANIA, STAMSUND, AND SYLTEFJORD.

**HUMPHREY DAVY & SON (LIM.)**

MANUFACTURING CHEMISTS AND PERFUMERS,  
WHOLESALE & EXPORT DRYSALTERS, OIL MERCHANTS & PACKERS,  
MANUFACTURERS OF

FURNITURE CREAM, POLISHING PASTE, WRITING INKS, LIQUID BLUE,  
KNIFE POLISH, PLATE POWDER, &c.

VICTORIA WORKS, Masbro Street, ROTHERHAM.

**JOHNS'**

The Best and Safest Medicine for all Disorders of the Liver and  
Digestive Organs; also invaluable in all Female Complaints.

Full  
Directions  
with each Box

**LIVER  
PILLS.**

PREPARED AND SOLD BY

**W. JOHNS, 6 Wilkes St., LONDON, E.**

In Boxes 1s. 1½d. and 2s. 9d. each.

(ESTABLISHED UPWARDS OF 50 YEARS.)

**EXTRACTUM SENNÆ LEGUMINUM LIQUIDUM;**

Or, FLUID EXTRACT OF SENNA PODS (RANKIN & BORLAND'S).

A pleasant, mild, and efficacious Aperient, superior in many respects to Cascara Sagrada. Dose—From  $\frac{1}{2}$  to 1 Fluid Drachm.  
See Paper by Dr. MACFARLANE in *The Lancet* of Saturday, July 27th, 1889, p. 164.

Prepared by **RANKIN & BORLAND**, Pharmaceutical Chemists, KILMARNOCK, N.B.

NO  
MORPHIA,  
OPIUM,



OR  
CHLORO-  
DYNE.

**SAM SMITH'S  
BRONCHITIS MIXTURE**  
1/- FOR COUGHS, ASTHMA, BRONCHITIS,  
DIFFICULTY OF BREATHING AND COLDS OF ANY KIND 1/-

CAN BE HAD FROM ALL CHEMISTS AND DRUGGISTS.

Wholesale Agents:—RAIMES & CO., York; GOODALL, BACKHOUSE  
& CO., Leeds; HIRST, BROOKE & HIRST, Leeds.

**DINNEFORD'S FLUID MAGNESIA**



PERFECT IN PURITY AND UNIFORM IN STRENGTH.

The most efficacious antacid and mild  
aperient for Delicate Constitutions,  
Ladies, Children, and Infants.

OF ALL WHOLESALE DRUGGISTS.

**SAVARESSE'S**

**CAPSULES.**  
**SANDAL WOOD; COPAIBA**

36s. and 18s. per dozen.

The physiological peculiarity of Savaresse's Capsules is that the *organic membrane* of which they are made so resists the action of the gastric juice that they rarely dissolve in the stomach: this avoids nausea, eructations, and indigestion.

The late Mr. WM. ACTON, F.R.C.S., says:—"In many instances I have known the capsule burst in the effort of swallowing, or *dissolve as soon as it is in the stomach*. An improvement has lately been introduced, by Messrs. Evans & Lescher, by enclosing copaiba in *membrane*, thus obviating many of the objections to all gelatine capsules."

**CASCARA SAGRADA,**  
**HAWLEY (in Capsules).**

The nauseous taste of this drug is effectually covered by enclosing a Concentrated Fluid Extract in Gelatine.

In boxes of 20 and 100 capsules, each containing equal to 30 drops of Fluid Extract.

PRICE—8/6 per doz.; 100 caps. 35/6 per doz.

**EVANS, LESCHER & WEBB,**  
LONDON.

LIVERPOOL:

MONTREAL: [4]

EVANS, SONS & CO. EVANS AND SONS (Lim.)



# T. & H. SMITH & CO.

MANUFACTURERS OF

MORPHIÆ HYDROCHLOR.

In powder and crystals.

MORPHIÆ ACETAS

MORPHIÆ TARTRAS

Introduced by us and specially prepared  
for hypodermic treatment.

JALAPINE

SALICINE

CHLOROFORM PURE

CHLOROFORM METH.

Our brand has been for many years known to  
the Wholesale Trade as absolutely pure.

CODEIA

APOMORPHIÆ MUR.

GINGERINE

CAPSICINE

ALOIN

RESINA SCAMMONII

CAMPHOR MONOBROM.

EDINBURGH Address—21 Duke Street.

LONDON Address—12 Worship Street, E.C.

NEW YORK Office—20 Cedar Street: FRAS. JAS. MACNAUGHTAN, Agent. [1]

**PAPAIN** (Dr. Finkler & Co.) The new DIGESTIVE  
FERMENT, combining the  
action of Pepsine and Pan-  
createine.

**PIL PAPAIN** (Dr. Finkler & Co.) In Bottles of 25, 50, and 100 (1 and 2 grains each)

**PURE SALOL** (Professor NENCKI'S PATENT.)  
The New Antiseptic and Anti-Rheumatic Remedy. Most valuable in the cure of Acute  
and Chronic Rheumatism, Dysentery, Cholera, &c.

**QUININE SULPHATE** And all other ALKALOIDS obtained from Cinchona Bark  
manufactured by the

FABBRICA LOMBARDA DI PRODOTTI CHIMICI, MILAN.

OBTAINABLE THROUGH THE WHOLESALE AGENT—

**B. KÜHN,** 36 St. Mary-at-Hill, **LONDON**

And all the Wholesale Drug Houses.

Price List and Pamphlets on application.

# J. F. MACFARLAN & CO.,

MANUFACTURERS OF

**MORPHIA AND ITS SALTS,**

AND ALL PRODUCTS FROM OPIUM.

**PURE CHLOROFORM**

ANSWERING ALL THE TESTS OF THE BRITISH PHARMACOPŒIA.

ANÆSTHETIC ETHER, ALOIN, BEBEEBIN, CHRYSOPHANIC ACID, SALICIN.

MAY BE HAD FROM ALL THE WHOLESALE HOUSES, AND AT

17 NORTH BRIDGE, EDINBURGH, AND 71 COLEMAN STREET, LONDON.

**LOFTHOUSE & SALTMER,**  
**MANUFACTURING CHEMISTS, WHOLESALE & EXPORT DRUG MERCHANTS**  
**HULL,**

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles.  
QUOTATIONS ON APPLICATION.

**SOLUT. ÆTHERIS NITROSI** (Æther. Hyponit.)

1 part to 5 Sp. Vini Rect. 56 o.p. makes Sp. Æth. Nit. 850.

This concentrated preparation, carefully drawn in our own laboratory, is highly recommended, and daily finding increased favour with the trade for making Sp. Nitre, as required for use, thus avoiding the risk of loss of Nitrous Æther, and the development of free acid, both of which are almost certain to occur in Spts. Nitre which has been some time drawn.

Price in 1-lb. Bottles, 3s. per lb.; in Winchester Quarts, 2s. 10d. per lb., net.

Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot;  
Otto de Rose, and all Essential Oils; Valentia Saffron; Vanillas; Fruit Essences; Carmine  
Aniline Dyes; Bees Wax, &c., &c. Applications for Special Quotations invited.



**THE CHEMISCHE FABRIK AUF AKTIEN,**

**Vormals E. SCHERING, BERLIN.**

**MANUFACTURERS OF PURE CHEMICAL PRODUCTS**

**AND PATENTEES OF**

**CHLORALAMID**

*SEE "BRITISH MEDICAL JOURNAL," 14 DECEMBER, 1889.*

Declared by the highest medical authority in this country to effect sound and comfortable sleep better than any of the Hypnotics which have been introduced during the last few years.

**DOSE, FROM 30 TO 50 GRAINS.**

**Important to Dispensers.**—Tell the patient to dissolve the Chloralamid in Whisky or Brandy, and afterwards add cold water to taste.

**DO NOT APPLY HOT WATER TO DISSOLVE OR THE PREPARATION WILL DECOMPOSE.**

Full particulars for Medical Practitioners and Dispensing Chemists, giving also interesting Clinical Reports, will be sent Post Free.

This Preparation, securing sleep without any ill effects, neither interfering with the activity of the heart, respiration, temperature, digestion, or urine secretion, will not fail to be the most favourite Hypnotic of the future.

Wholesale Drug and Chemical Houses may obtain Schering's Chloralamid from

**A. & M. ZIMMERMANN, LONDON**

**SOLE WHOLESALE AGENTS.**



# NOTICE.

## TOWLE'S PENNYROYAL & STEEL PILLS

Mr. E. T. TOWLE, of Dryden Street, Nottingham, Chemist and Druggist, begs to inform the Trade and the Public that he is possessed of the sole right to manufacture and sell TOWLE'S PENNYROYAL AND STEEL PILLS, and no other person or firm is intrusted in such business.

All orders to be addressed to Mr. E. T. TOWLE, or to his recognised Agents.

(Signed) **EDWD. T. TOWLE**, Nottingham.



**CAUTION.** Immediate proceedings will be taken against all persons pirating the Title, Name, or Trade Mark.

## CURTIS & Co's EFF. BISMUTH, PEPSINE & STEEL

(Formerly YOUNG & POSTANS.)

GRAN. EFFER. BISMUTH AND PEPSINE  
GRAN. EFFER. BISMUTH, PEPSINE AND STRYCHNINE  
GRAN. EFFER. BISMUTH, PEPSINE AND QUININE  
GRAN. EFFER. BISMUTH, IRON AND QUININE  
GRAN. EFFER. BISMUTH CITRATE  
GRAN. EFFER. BISMUTH, IRON AND STRYCHNINE  
GRAN. EFFER. CITRATE OF CAFFEINE.

GRAN. EFFER. IRON AND BISMUTH  
GRAN. EFFER. IRON, QUININE AND STRYCHNINE  
GRAN. EFFER. IRON AND ARSENIC  
GRAN. EFFER. IRON AND PEPSINE  
GRAN. EFFER. IRON AND QUININE  
GRAN. EFFER. IRON, QUININE AND PEPSINE  
GRAN. EFFER. HYDROBROMATE OF CAFFEINE.

AND ALL OTHER GRANULAR PREPARATIONS.

## GRANULAR EFFERVESCENT ANTIPYRIN

(ORIGINATED AND INTRODUCED BY CURTIS & CO.).

See that all these preparations bear the name of  
**CURTIS & CO., 48 Baker Street, Portman Square, LONDON, W.**

## C. R. HARKER, STAGG & MORGAN

**WHOLESALE & EXPORT DRUGGISTS**

MANUFACTURING CHEMISTS

**IMPORTERS & DISTILLERS of ESSENTIAL OILS**

PHARMACEUTICAL EXTRACTS—FLUID AND SOLID.

**STANDARDIZED AND GUARANTEED DRUGS AND PREPARATIONS.**

**15 LAURENCE POUNTNEY LANE, & ARTHUR ST. WEST, LONDON, E.C.**

REGISTERED ADDRESS FOR TELEGRAMS—"EDULOINE LONDON." Telephone No. 1949.



## CHEMISTS WHO HAVE FAILED

To find a suitable Malt Extract should give Loefflund's a trial. It neither ferments nor crystallises, and is absolutely pure.  
In 2 cwt. casks, 28 lb. tins, 7 lb. tins. Also Malt Extract and Cod Liver Oil in Bulk.

**LOEFLUND'S**

**KINDERMILCH & ALPINE MILK BISCUITS (POWDERED) (INFANT'S FOODS)**

Are prescribed by the leading specialists in diseases of children.

**LOEFLUND'S CREAM EMULSION (Cremor Hordeatus)**

Is invaluable to those who cannot assimilate Cod Liver Oil.

**Sole Agents—ROBERT BAELEZ & CO., 14-20 ST. MARY AXE, E.C.**



# WYLEYS & CO.

## MANUFACTURING CHEMISTS

AND

## DRUG GRINDERS.

WAREHOUSES, LABORATORIES, AND DRUG MILLS,  
**COVENTRY.**

### COMPOUND SULPHUR PELLETS

ACCORDING TO THE FORMULA OF

**SIR ALFRED B. GARROD.**

One Pound contains 1,000 Pellets.

A Pound of ordinary Sulphur Lozenges will  
only give 460.

*Each Pellet contains Five Grains of Pure Sulphur  
and One Grain of Cream of Tartar.*

PRICE, in bulk, 2/6 per lb.; or put up in metallic  
boxes (20 pellets in each), with descriptive labels,  
2/- per dozen.

The above may also be had sweetened with Saccharine  
at 3/- per lb.

### GASTRIC ANTACID PELLETS,

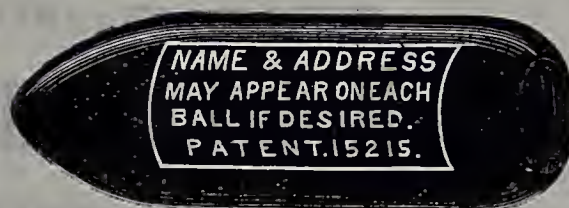
ACCORDING TO THE FORMULA OF

**SIR WILLIAM ROBERTS.**

PRICE, in bulk, 2/6 per lb.; or put up in metallic  
boxes (20 pellets in each), with descriptive labels,  
2/- per dozen.

### THE DURAPLASTIC COATED HORSE BALL.

(PATENTED.)



"The obvious superiority of these balls over the old paper-wrapped articles will impress the most stolidly conservative of farmers."—*The Chemist and Druggist*, October 27, 1888.

No. 4.—Alterative Balls	...	...	24/	per gross.
" 5.—Astringent Balls	...	...	24/	"
" 12.—Condition Balls	...	...	24/	"
" 6.—Cordial Balls	...	...	24/	"
" 7.—Cough Balls	...	...	24/	"
" 16.—Cough Balls	...	...	27/	"
" 17.—Cough Balls	...	...	27/	"
" 8.—Diuretic Balls	...	...	24/	"
" 9.—Fever Balls...	...	...	24/	"
" 1.—Physic Balls	...	...	24/	"
" 2.—Physic Balls	...	...	30/	"
" 3.—Physic Balls	...	...	36/	"
" 18.—Physic Balls	...	...	42/	"
" 19.—Physic Balls	...	...	48/	"
" 15.—Stimulating Balls	...	...	24/	"
" 10.—Tonic Balls...	...	...	24/	"
" 11.—Tonic Balls...	...	...	20/	"
" 13.—Worm Balls	...	...	30/	"
" 14.—Worm Balls	...	...	60/	"

#### PRIVATE FORMULÆ.

WYLEYS & CO. will be glad to prepare Patent Duraplastic  
Balls from private recipes.



# BARRON, HARVEYS & CO.

GILTSPUR STREET, LONDON, E.C.

Beg to inform their friends and the Trade generally that, having purchased the Business of

**BARRON, SQUIRE & CO., BUSH LANE,**

and also the various Formulæ of the Special Preparations of

**JAMES BASS & SONS, HATTON GARDEN,**

they are prepared to execute orders for the same, and pledge themselves to supply them in all their integrity.

*Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.*

## W. EDWARDS & SON,

157 QUEEN VICTORIA STREET, LONDON,

WHOLESALE AND EXPORT DEALERS IN

## Patent Medicines and Proprietary Articles,

ENGLISH, AMERICAN, FRENCH, &c.

**SOLE AGENTS for ROCHE'S HERBAL EMBROCATION,**

Burchell's Anodyne Necklaces, Ford's Balsam of Horehound, Widow Welch's Pills, by Mrs. Smithers, Oxley's Essence Ginger, and the preparations of Messrs. Hudson & Son, late of the Haymarket, London.

PRICE LISTS SENT ON APPLICATION. ORDERS CAREFULLY AND PROMPTLY EXECUTED.

ESTABLISHED 1813.

## CLAY, DOD & COMPANY,

WHOLESALE AND EXPORT DRUGGISTS,

52 ST. ANNE STREET, LIVERPOOL.

Address for Telegrams—"CLAY LIVERPOOL."

Telephone No. 1192.

Mills and Laboratories—WAKEFIELD STREET.

**IMPORTERS OF ESSENTIAL OILS, OLIVE OILS, CASTOR OIL,  
FINEST NORWEGIAN COD LIVER OIL.**

Manufacturers of all descriptions of

**PHARMACEUTICAL PREPARATIONS, COATED TASTELESS PILLS.**

*Powders ground in own mills. Purity guaranteed.*

*Samples free on application. Special Quotation to Cash or Large Buyers. Monthly Priced List forwarded on receipt of business card.*

**BITUMINOL, OR VASELINE SUBSTITUTE.**



**METHYLENE.**  
Obtained by the action of Metallic Zinc on Chloroform and Alcohol.  
Discovered to be a general Anesthetic by Dr. RICHARDSON in 1867.  
Bottles, 16s.; 8-oz., 8s. 6d.; 4-oz., 4s. 6d.; 2-oz., 2s. 6d.

**COMPOUND ANESTHETIC ETHER.**  
For producing Local Anesthesia.  
In 4-oz., 10-oz., and 20-oz. Stoppered Bottles, 2s., 4s., and 7s.

**OZONIC ETHER.**  
In 2-oz., 4-oz., 8-oz., and 16-oz. Stoppered Bottles, 2s., 3s. 6d., 7s., and 12s.

**PEROXIDE OF HYDROGEN.**  
First introduced as a Medicine by Dr. RICHARDSON.

**ETHYLATE OF SODIUM**  
Dr. RICHARDSON'S Formula, for removing Nævi, &c. In 4-oz. & 1-oz. Bottles, with elongated Stoppers for applying the Caustic, 2s. 6d. & 1s. 6d.

**STYPTIC COLLOID.**  
For promoting the Healing of Wounds by the first instant.  
In 2-oz. and 4-oz. Bottles, with Brush, 2s. 6d. and 4s. 6d.; 16-oz., 12s.

**CHARCOAL CAPSULES**  
Containing Pure Vegetable Ivory Charcoal.  
In Boxes, 2s. 6d. each.

**J. ROBBINS & CO.**  
OXFORD ST. 147

## TYPKE & KING,

Trade Mark **CHEMICAL MANUFACTURERS,** Trade Mark

**22 LAURENCE POUNTNEY LANE,**  
**LONDON, E.C.**

Registered. **Manufactories: MITCHAM & RAINHAM.** Registered.

Pure Acids—VALERIANIC ACID and all VALERIANATES. ANTIMONY GOLDEN SULPHURET, ANTIM: CROCUS LUMP and POWDER. Essences of Pear and Pineapple. POTASSIUM CYANIDE. Nitrate of Ammonia, crystal and granulated. Potass. Sulphid. Iron Perchloride, solid and solution. HYPOPHOSPHITES OF LIME, MANGANESE, SODA, POTASH, &c. ACID PHOSPHORIC 1750 and 1500. Hydrochinon and all Chemicals for Photography.

## LEO & CO.

MANUFACTURERS OF

**COMPRESSED**  
**CHLORATE OF POTASH,**  
Chlorate of Potash and Borax,  
&c., &c.



Our Goods are guaranteed the Best of any of the cheap Compressed Goods in the Market.

They are supplied by all the Wholesale Houses.

Quotations given for large and small quantities.

**8 CREECHURCH LANE, LONDON, E.C.**

## WILLIAM FOX & SONS,

**WHOLESALE DRUGGISTS, &c.,**

**109 & 111 Bethnal Green Road, LONDON, E.**

Cabinet Varnishes, Polishes, Glaze, Finishing Spirit,  
Glues, Wood Stains, Gums, Resins, Shellacs.

PRICES FORWARDED ON APPLICATION.

TELEPHONE NO. 1499.

"FOR THE BLOOD IS THE LIFE."

**CLARKE'S**  
**WORLD FAMED**

**BLOOD MIXTURE,**  
**THE GREAT BLOOD PURIFIER AND RESTORER.**

(Trade Mark—"BLOOD MIXTURE." Registered No. 3275.)

The Celebrated CURE FOR Scrofula, Scurvy, Eczema, Blood and Skin Diseases, and Sores of all kinds.

Wholesale of all the Wholesale Houses. Usual terms.

Sole Proprietors, **THE LINCOLN & MIDLAND COUNTIES' DRUG COMPANY, LINCOLN.**

Counter Bills and Posters, with Name and Address, also Show Cards, on application. Printed matter supplied in any Language for Foreign Agents.  
**CAUTION.**—The Proprietors will take immediate proceedings against all persons pirating their Trade Mark, "Blood Mixture," Labels, Wrappers, &c., or Advertisements, or in any way infringing their rights.



# WITHOUT A RIVAL!

From the time Medicine was first discovered by the Ancients down to the present none ever made such progress as

## BEECHAM'S PILLS.



They stand without a rival, and have by far the largest sale of any Patent Medicine in the World. This is a fact which every business man is bound to admit.

All Foreign Dealers will find BEECHAM'S PILLS the most Saleable Medicine in the Market.

The health-restoring and life-giving properties of these Pills are such as to increase their demand every year.

The words "BEECHAM'S PILLS, SAINT HELENS," are on the Government Stamp affixed to each box.

Prepared only and sold by the Proprietor, THOMAS BEECHAM, ST. HELENS, LANCASHIRE, ENGLAND, in boxes at 1s. 1½d. and 2s. 9d. each, with full instructions for use.



SEQUAH'S OIL.



SEQUAH'S PRAIRIE FLOWER,  
AND  
Sequah's Oil.

Prepared solely by

SEQUAH, LIMITED.

BUYERS ARE CAUTIONED TO SEE THAT THEY GET THE  
**GENUINE**



**DR. JOHN HOOPER'S PILLS,**

Which may be known by the Name of the Inventor being on the Government Stamp.

*Handbills and Show Cards will be sent on application to*

MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.C.

**AMERICAN BUYERS are particularly Cautioned!!**

Telegraphic Address—"FEEDING BOTTLES LONDON."



"NOT TO KNOW THESE ARGUES ONESELF UNKNOWN."

**WARRICK**

Real Heliotropes



**BROTHERS'**



Real Roses

18 Old Swan Lane,

**LONDON, E.C.**



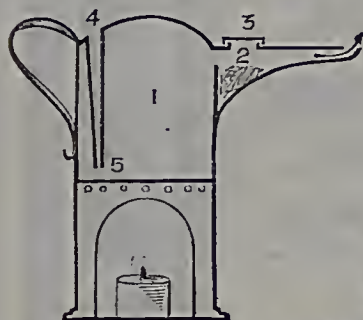
Real Violets

DELICIOUS + CACHOUS.

3/- per lb., Splendidly Labelled.

4/- per dozen boxes, Gold Embossed on Calf.

# INFLUENZA.



## USE "PINEOTAS" OIL

FOR INHALATION OR FUMIGATION.

In large Bottles, 6/6 per dozen, or 10/- per gallon.

**HAMILTON'S FUMIGATOR AND INHALER,**

For use with PINEOTAS OIL, is the most handy and complete article in the market, now selling rapidly, price 16/- per dozen complete. The steam passes through the reservoir (2) containing the disinfectant, instead of being mixed with the water, as is usually the case.

**HAMILTON & CO., HIGH STREET, WANDSWORTH, LONDON, S.W.**

Guaranteed Pure English Sulphate of Quinine.

# PENNY QUININE.

QUININE PILLS.

INFLUENZA PILLS.

Four (Tonic) Doses for One Penny.

One (Fever) Dose for One Penny.

Four Pennyworth in a Metal Box.

**RIVERS HICKS, 5 SAVAGE GARDENS, TRINITY SQUARE, E.C.**  
LIBERAL DISCOUNT TO THE TRADE.

## VINCENT WOOD,

28A, 29, 30, 31 PATERNOSTER SQ.; 10, 11, 12, 13 ROSE ST.,  
**LONDON, E.C.**

DEPOTS AT PARIS, NEW YORK,  
AND BRUSSELS.

Factories at  
STRATFORD; ROSE ST; NOTTINGHAM

Telegraphic Address—"ACME LONDON."  
Registered Trade Mark—"EUREKA."

Bona-fide Manufacturer of Trusses,  
Elastic Hosiery, Abdominal Belts,  
the Eureka Medicated Pine Wool  
Felt Appliances, Obstetric Binders,  
Chest Expanding Braces, Suspen-  
sory Bandages, &c., &c.

Any difficulty in procuring the "Eureka" Brand of goods from you  
Wholesale Houses, apply direct for name of nearest Agent.  
ESTABLISHED 1840.



Models under Glass Show Cases, Blocks, Cor-  
sulars, Show Cards, supplied free of  
charge to those stocking my goods.

43 Highest Awards over all Competitors throughout the  
World.

## SEABURY & JOHNSON,

Original Manufacturers of

**PHARMACOPŒIAL AND SURGICAL  
PLASTERS,**

IN RUBBER COMBINATION.

Antiseptic Dressings and Absorbents, Bandages  
Oiled Silk and Muslin, and Surgical Dressings  
of every description.

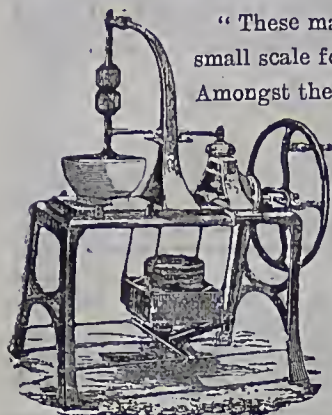
Supplies may be obtained through any Wholesale Druggists and Dealers in  
Surgical Appliances, or from the Proprietors,

**SEABURY & JOHNSON,**

**46 Jewin Street, London, E.C.,**

NEW YORK & HAMBURG.



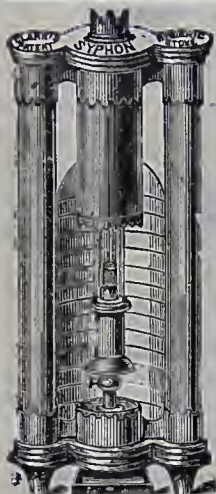
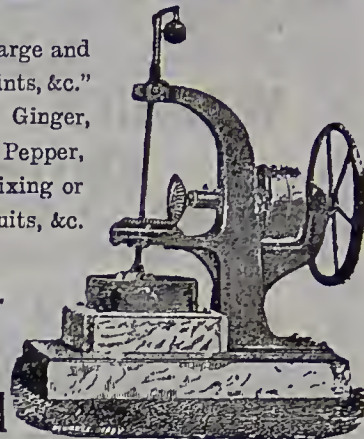
**GOODALL'S PATENT GRINDING & LEVIGATING MACHINES.**

"These machines have for many years proved most serviceable on a large and small scale for Grinding, Levigating, and Mixing Powders, Pill Masses, Paints, &c." Amongst the articles which are readily ground by it may be mentioned Ginger, Seeds, Salts of all kinds, Cream of Tartar, Sugar, Cocoa, Pepper, Spice, Jalap, Rhubarb, Gums, Aloes, Barks, &c.; and for mixing or kneading Lozenges, Pill Masses, Glaziers' Putty, Bread, Biscuits, &c.

ILLUSTRATED PRICE LIST, with full particulars, sent free.

Prices from £8 10s. to £60.

**E. F. GOODALL, Barton-under-Needwood**

**TO CHEMISTS AND DRUGGISTS.**

AGENTS WANTED FOR THE SALE OF OLARK'S PATENT

**"SYPHON"**

(REGISTERED TITLE)

**HYGIENIC CONDENSING GAS HEATING STOVES.**

NO FLUE REQUIRED. ARE FREE FROM SMELL OR SMOKE.

All injurious vapours are reduced to harmless liquid inside the Stove, and passed out at foot into a tray provided for that purpose.

FOR USE IN HOSPITALS, SICK CHAMBERS, BEDROOMS; HALLS, CONSERVATORIES, CHURCHES, SCHOOLS, ETC.

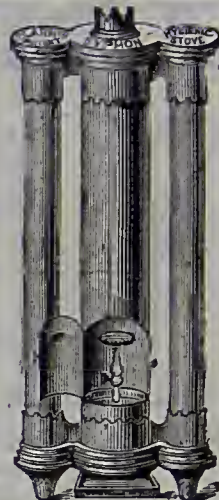
Specially suitable for patients suffering from Bronchial affections, as a moist atmosphere is obtainable when required.

FOR TERMS, PARTICULARS, AND PRICES, APPLY TO

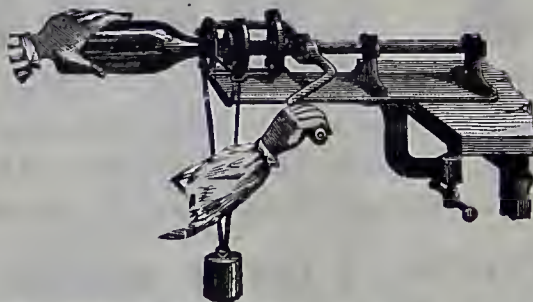
**S. CLARK & CO.,** Patentees & Makers, Syphon Works, Park St., Islington, LONDON, N.

Telegraphic Address:—"SYPHON STOVES LONDON."

Wholesale Agents:—Messrs. MAW, SON & THOMPSON, Aldersgate Street, London, E.C.

**NEW CAPSULING MACHINE**

The only Machine  
which leaves no crease  
or pleat on the  
Capsule.



Can be fixed to any  
Counter.  
A single pull of the lever  
is sufficient  
to fix the Capsule.

Patentee—**C. MELIN, 37 Crutched Friars, LONDON, E.C.**

**JAMES BURROUGH, S. V. R.**

CALE ST., CHELSEA, S.W.

and Methylated Spirit

AT LOWEST PRICES.

WRITE FOR QUOTATIONS.

**HOLLOWAY'S PILLS & OINTMENT**

Have the Largest Sale of any Medicines in the World.

MANUFACTURED ONLY AT

Professor **HOLLOWAY'S** Establishment,  
78 New Oxford St. (late 538 Oxford St.), London,

And sold at 1s. 1½d., 2s. 9d., 4s. 6d., 11s., 22s., and 33s. each Box or Pot.  
Chemists and Druggists selling "Holloway's Pills and Ointment" can  
on application to the above address, or to the Wholesale House with whom  
they deal, be supplied free of charge with Handbills and Posters with their  
name and address printed at foot.

Wholesale Terms see List of "Proprietary Articles" in most Price Currents.

HAMBRO SPECKLED



TRADE MARK  
REGISTERED.

**LEECHES!**

Warranted Healthy. Wholesale  
and for Exportation. Direct  
from Marshes.

**FITCH & NOTTINGHAM,**

LEECH BREEDERS,  
4 CANONBURY SQUARE, LONDON, W.

All Orders by Post receive immediate attention.





PHILADELPHIA, 1876.

PRIZE MEDALS. INTERNATIONAL EXHIBITIONS.



MELBOURNE, 1880.



SYDNEY, 1879.

# KILNER BROTHERS

## GLASS BOTTLE MANUFACTURERS.

No. 3<sup>A</sup> GREAT NORTHERN GOODS STATION, KING'S CROSS, LONDON.



PARIS, 1878.

Telegraphic Address :

"BOTTLES LONDON."



LONDON, 1862.

Telephone

No. 7509.



PARIS, 1875.

EXCELLENT  
QUALITY.

EXTENSIVE  
VARIETY.

PRICES LOW,



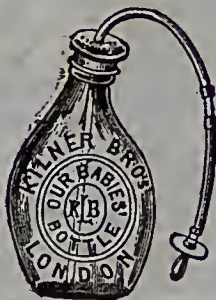
Dispensing.

FIRST ORDER OF MERIT,  
MELBOURNE, 1888.



Dispensing.

QUOTATIONS  
AND  
SAMPLES SENT  
ON  
APPLICATION,



Feeding.

WINE, SPIRIT,  
BEER,  
CONFECTIONERY  
BOTTLES.

FEEDING, PICKLE,  
DRUG, OIL,  
SAUCE, VINEGAR  
BOTTLES.

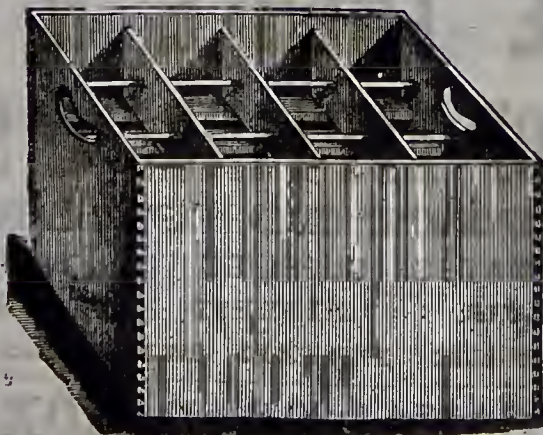


Mineral Water  
BOTTLES.



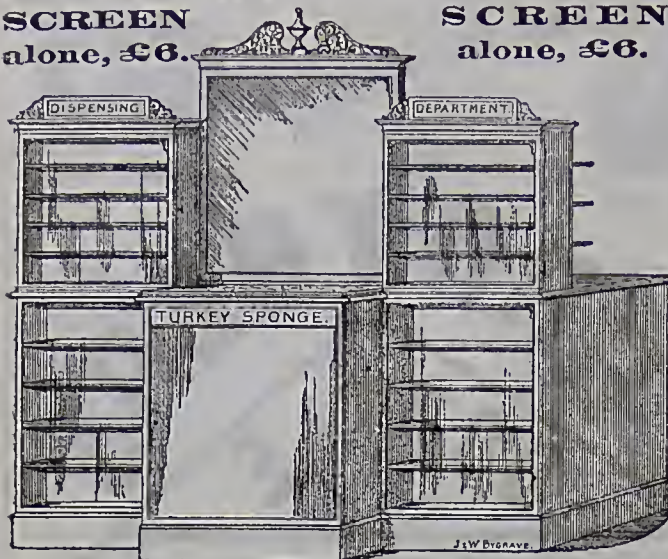
Mineral Water  
BOTTLES.

VAN BOXES.



CASES.



SCREEN  
alone, £6.SCREEN  
alone, £6.

The above represents a solid mahogany Dispensing Screen and glass fronted Counter. The Screen has a glass case at each side, with plate-glass tablets and gold writing on top—"Dispensing Department"; and a plate-glass mirror with marble slab in centre, with mahogany ornamental wood on top. Doors of screen are glazed with best 21-oz. glass, and inside the cases are polished black, with three long shelves right along the back for dispensing bottles. The Counter opens in front with three solid mahogany doors glazed with best 21-oz. glass, centre for sponges underneath. Counter at the back is fitted with a nest of deal drawers and shelves. If 6 feet long, and 5 feet high to top of cases, complete, **£11 10s.**

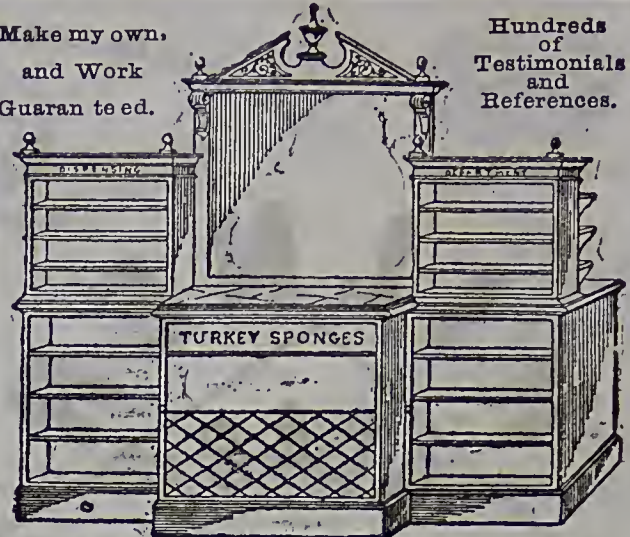
**J. & W. BYGRAVE.**  
SHOP FITTERS,

111 Shepherdess Walk, City Road, LONDON, N.

For further particulars please send Business Card.

Make my own,  
and Work  
Guaranteed.

Hundreds  
of  
Testimonials  
and  
References.



The above represents a Plate-glass and Mahogany Dispensing Screen and Counter. The cases on each side of the marble slab over sponge case have silvered glass backs, and are fitted with movable shelves; the cases in front of counter are also fitted with movable shelves. The mahogany used is beautifully figured. At back under counter fitted with Drawers for Corks, Labels, Paper, &c., &c., and the back of screen with three shelves the entire length for Bottles.

6 ft. long, complete, **£18**; if Screen only, without Counter, **£8 10s.**

**ELKANAH NATALI**

(Established 20 Years),

SHOW CASE MAKER AND SHOP FITTER,  
207 OLD STREET (Shoreditch End), LONDON  
Workshops—HENSON STREET, E.C.  
(ONLY ADDRESSES).

No connection with any other house of the same name.  
PLEASE ADDRESS IN FULL.

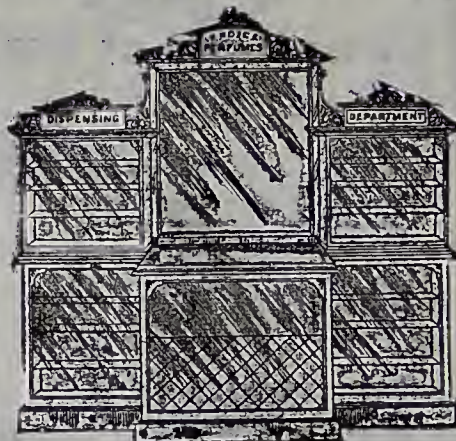
## "THE CHEMIST" DISPENSING COUNTER.

6 feet long by 2 feet wide .. **£24**  
If the Dispensing Screen only, **£12**

This handsome Dispensing Counter is manufactured in Spanish mahogany, and of the best workmanship, so that it will stand any climate. The counter has a solid mahogany top, and plate-glass case front. The centre part fitted to take sponge. A mahogany screen on top, consisting of two plate-glass cases, with shelves inside, and large plate-glass mirror in the centre, and three glass tablets with gold writing in ornamental mahogany carved work. The back of screen fitted with small shelves and a glass poison cupboard. The inside of counter fitted with strong counter drawers, label and cork drawer, open shelves, &c.

**BOWLING & GOVIER**

Manufacturers of High-class Shop Fittings,  
GUN ST., BRUSHFIELD ST.  
BISHOPSGATE, E.C.



### NOTICE TO THE TRADE.

In consequence of inferior Second-hand Goods being sold for our make, we have found it necessary to protect our reputation for best work with a Trade Mark, as above, and unless goods are so stamped we cannot be answerable.

**GEORGE TREBLE & SON,**  
FOR  
**CHEMISTS' SHOP FITTINGS & SHOW CASES.**  
**SHOPS FITTED FROM £50.**

DESIGNS AND ESTIMATES SUPPLIED IN TOWN OR COUNTRY.  
ESTABLISHED FORTY YEARS. HIGHEST REFERENCES CAN BE GIVEN  
**THREE PRIZE MEDALS.**

**Steam Factory: 27 CANAL ROAD, HOXTON, LONDON.**



**AUSTIN & CO.**

Patentees and Manufacturers of FANCY CARD

**ROUND, OVAL, AND SQUARE SHAPED BOXES**

FOR POSTAL AND GENERAL PURPOSES.

ALSO PATENT BARREL PACKAGES WITH METAL ENDS, FOR DRY GOOD

AND

*Makers of best class of Violet Powder Boxes, and high-class goods of every description for Perfumery, &c.***8 GREVILLE ST., HATTON GARDEN, LONDON, E.C.**

STEAM WORKS, 2 PRINTER'S BUILDINGS.

[2]

ESTABLISHED 1830.

**S. HOWLETT.**

MEDICAL AND

**GENERAL SHOP FITTER,**

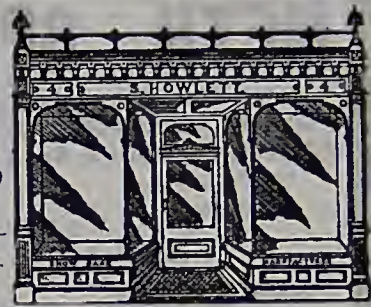
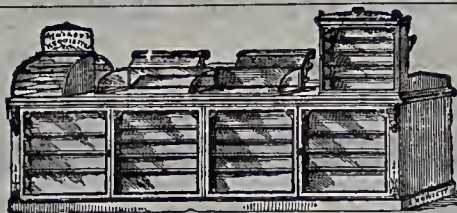
Shop-Front Builder and Show-Case Maker.

EXPORT ORDERS CAREFULLY PACKED AND SHIPPED.



SHOPS FITTED by Contract, in Town or Country, with every requisite, on the most improved principles, and at lowest prices.

NUMEROUS REFERENCES may be obtained of Leading Chemists in all parts of the Kingdom.



A LARGE STOCK of New and Second-hand Fittings and Cases to be sold very CHEAP.

CABINET FITTER to the Pharmaceutical Society of Great Britain.

PLANS and ESTIMATES SUPPLIED.

Manufactory and Showrooms—4 Lindley St., Sidney St., Mile End Road, LONDON, E.

**NOTICE !!**

The PROPRIETORS of the above Brand of DISPENSING AND OTHER BOTTLES of their make beg to advise the Trade that, owing to the continued and very important advance in price of (*Manufacturers'*) Coal, as well as all other raw materials, they are compelled to Raise Prices to the Wholesale Houses from 1st January, consequently Higher Rates must necessarily follow.

Trade Mark.



Registered.

THE  
**ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH,**  
**12 FILL MALL EAST, LONDON, S.W.**

**SOLE AGENTS FOR DR. WARLWORTH'S CALF VACCINE.**

Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.  
HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes, two-thirds full, 1s. 8d. each; Tubes one-third full and Lancet-charged points, 1s. each; Pin-points, 1s. 1d. each. Eighteen charged Small Points, 5s. Tubes, two-thirds full (same as those mentioned above, but without source), in quantities for export, £5 per 100 Tubes. Pin-points uncharged, 1s. per dozen. Vaccine Ejectors, 1s. 8d. each, including postage. Vaccinations by appointment. P.O.O.'s (including postage, and crossed London and Westminster Bank) with orders, payable to  
EDWARD DARKE Secretary.

Office hours, 10 to 4. Saturdays 10 to 2.

**DISPENSING BOTTLES & PHIALS****BEFORE ORDERING**

Of any other House, please write for prices of any size required to either of our Warehouses—

25 Francis St., Tottenham Court Road

61 Halton Road, Islington

153 Upper Thames Street, City

**LONDON.**

ESTABLISHED UPWARDS OF 50 YEARS.

**I. ISAACS & CO.**

GLASS BOTTLE MANUFACTURERS.

BANKERS: LONDON AND WESTMINSTER BANK.



**PLEASE  
NOTE.**

**S.V.R.**

We guarantee our **S.V.R.** to stand the Nitrate of Silver and the Ammonia tests, and to be entirely free from the offensive odour which usually characterises low-price spirits.

Pure Grain Spirit B.P., 56 o.p., 18/5 per gallon.  
" " Double Distilled, " 18/9 "  
CASH WITH ORDER.

**SPECIALITY FOR PERFUMERY.**

This pure grain spirit, which has been thrice rectified and filtered through charcoal, is being largely used in making high-class Perfumes.

Price, 19/-, 56 o.p.; 19/6, 60 o.p. Cash with order.

Reductions for Quantities.

**STEPHEN SMITH & CO., BOW, LONDON, E.**

MAKERS OF  
**METH. SPIRIT** **FINEST GRAIN.** NOTE THE PRICES. 61 o.p. 2/2 per gall. in casks } 2½ per cent.  
64 o.p. 2/3 " " } Delivered  
TINS EXTRA.

WE ALSO TURN OVER THE VARIOUS  
GUMS, SHELLACS, WAX,  
GELATINES, GLUES &c.,  
ON BROKERAGE  
PROFITS.

WE INVITE  
COMPARISON

ESTABLISHED  
**1840.**

TELEGRAMS—"METHYL MANCHESTER,"  
**J. & D. MACNAIR & CO.,**  
OHEETHAM DISTILLERY AND WAREHOUSES,  
AND AT 29, 31, 33 Robert St.,  
BRIDGETON, GLASGOW. **MANCHESTER.**

SPECIAL QUALITY. **S.V.R.** WATER WHITE. GRAIN DISTILLED. | SPECIAL IMPORT OF  
**COD, CASTOR, & OLIVE OILS.**

**S** <sup>0</sup>/<sub>56</sub> **V** <sup>0</sup>/<sub>60</sub> **R**  
18/3 18/9

VERY HIGHLY RECTIFIED  
AND CHEMICALLY

PURE.

Cash with  
Order

**GEORGE PHILLIPS & CO.**  
St. Andrew's Distillery, Clerkenwell Road,  
**LONDON, E.C.**

Cash  
with Order.

THE  
CHEAPEST HOUSE  
FOR METHYLATED SPIRIT.

**S** <sup>0</sup>/<sub>64</sub> **V** <sup>2</sup>/<sub>3</sub> **M**

SPECIAL QUOTATIONS FOR QUANTITY.

**ANILINE DYES**

TO SUIT ALL TRADES.

**BEST SPIRIT BLACK  
IN THE MARKET.**

Mahogany Stain  
Ebony Stain  
Oak Stain  
Walnut  
Stain

**PRONK, DAVIS & CO.**  
3 TRINITY PLACE,  
TOWER HILL, LONDON, E.C.

COLOURS.  
CHEMICALS.  
INDIGO PASTE.

**CUDBEAR.**

DYEWOOD EXTRACTS.

BRONZE POWDERS AND METAL LEAF.



# ANGLO-AMERICAN OIL COMPANY, LIM.

LONDON.

HULL.

GREAT YARMOUTH.

LIVERPOOL.

NEWCASTLE.

LYNN.

BRISTOL.

SOUTH SHIELDS.

STOCKTON.

HEAD OFFICES—16 ST. HELENS PLACE, BISHOPSGATE ST., LONDON, E.C.

## American Refined Petroleum.

The long established superiority of "**Tea Rose**," "**Royal Daylight**," "**White Rose**," and "**Westminster**" American Petroleum Oils, manufactured by the Standard Oil Company of the United States, is well known to the Trade and to Consumers; and no Oils are so widely and justly celebrated. Their superior burning qualities, freedom from odour and from any tendency to smoke, and their general excellence, have placed them above comparison with any and all other brands.

In order to meet the largely increasing demand for these oils, and the better to supply the Trade generally, we have arranged to import them from the United States in bulk as well as in barrels. We shall fill the Oil which we import in bulk into barrels at our own wharves, and as our cooperage facilities are modelled upon the best American methods, buyers will receive the Oil in tight and clean packages.

Our Tank Steamers, "**Manhattan**" and "**Bayonne**," in their construction, arrangements, power and size, are in advance of any tank steamers afloat, and each has a carrying capacity of 4,000 tons, equivalent to 28,000 barrels of Oil by each steamer.

We shall keep large stocks of these Oils constantly on hand at all our Importing Centres and Depôts, and in this manner be able to supply the Trade promptly. Being the representatives in the United Kingdom of the Standard Oil Company, of America, we are in the best possible position for supplying the trade on the most favourable terms.

To cover the special requirements of London buyers, we have completed the construction of a large Storage Wharf at Purfleet, which will be worked in connection with our Depôts at—

AILS A STREET, BOW CREEK, E.

CANAL WHARF, CHALK FARM ROAD, N.W.

ALBANY WHARF, ALBANY ROAD, CAMBERWELL, S.E.



**"WORTH ITS WEIGHT IN GOLD!"****BRAGGI'S  
OINTMENT AND PLAISTERS.**A CERTAIN and SPEEDY CURE for  
SPRAINS, BRUISES, BURNS, WOUNDS, BOILS,  
SCIATICA, ECZEMA, PILES,

And "the thousand ills which flesh is heir to."

HUNDREDS OF TESTIMONIALS FROM WELL-KNOWN PERSONS!

Ask your Chemist for the OINTMENT or PLASTER, and

**DON'T BE PUT OFF WITH ANY OTHER.**

Sold everywhere, 1/1½. Post free for 15 Stamps.

P. BRAGGI &amp; CO., Ltd., 92 Bartholomew Close, London, E.C

**COLTHURST & HARDING,****BALL DENOTES  
COLOUR OF PAINT.**BRISTOL—Manufactories: Phoenix Wharf and  
Temple Gate. Offices: Temple Gate. Telegrams:  
"Phoenix Bristol."LONDON—Manufactory: Alpha Works, Millwall  
E. City Office: 16 Fish Street Hill, E.C. Tele-  
grams: "Alpha Brand London."**HARD LUSTROUS ENAMEL,**  
IN ALL THE ART SHADES.For all kinds of decoration on Wood or Iron. Dry  
with a surface like Porcelain. Sold in small or large  
Tins, or in bulk. Prices and shades on application.**WHITE LEAD, ZINC WHITE,  
PAINTS & COLOURS** OF ALL KINDS.**MIXED PAINTS READY FOR USE,**  
In Tins, 1, 2, 4, 7, and 14 lbs. each.**HIGH-CLASS VARNISHES**Of all kinds, for Coachbuilders, Decorators, &c.  
OIL BOILERS, REFINERS, & MERCHANTS  
*Export Orders receive special and prompt attention.***DESTRUCTION OF RATS,**

&amp;c.

**STEINER'S  
VERMIN PASTE**

REGISTERED.

*Is used in  
Australia,  
New Zealand,  
West Indies,  
India,  
Cape,  
etc., etc.**Is used  
in  
England,  
Scotland,  
Ireland & Wales.**Is used in  
South America.*Is a Sure and Certain Destroyer of  
**RATS, COCKROACHES, MICE, AND BLACKBEETLES.**  
**IT NEVER FAILS!!!**The great strength of Steiner's Paste is not impaired in hot climates.  
Sold in 3d., 6d., and 1s. Glass Jars, and 2s. 6d. Tins.  
Wholesale and Export at the**WORKS, HENRY ST., LIMEHOUSE, LONDON.**

ASK YOUR CHEMIST FOR IT.

Established 1868.

*Used on the Royal Farms at Windsor, Osborne, and Sandringham, and by  
the principal Stockbreeders everywhere for nearly 60 years.***DAY, SON & HEWITT'S  
HORSE, CATTLE, AND SHEEP MEDICINES.****THE CHEMICAL EXTRACT.**For assuaging pain and inflammation in all wounds, saddle galls, strains,  
bruises, swellings and relaxed tendons in Horses. For paining after calving  
and lambing, and for swollen udders and sore feet.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

**THE BED DRENCH.**Celebrated for inflammatory disorders, such as fevers, pleurisy, foot-and-  
mouth complaints, yellows, surfeit, and red-water. Also for difficult calving  
and lambing. Admirably adapted for cleansing and checking feverish  
symptoms in Cows and Ewes after a bad time of parturition.

For Sheep, 3s. 6d.; for Cattle, 13s. per dozen Box.

**THE GASEOUS FLUID.**Unmatched for colic or gripes and debility in Horses, for colds, chills,  
chivering fits, flux and diarrhoea in Cattle, Calves, and Sheep. For Ewes  
weakly after lambing and blown Cattle and Sheep, its effects are marvellous.

20s. per dozen Box.

**THE GASEODYNE.**Used as laudanum in uncontrollable spasmodic pains and violent bowel  
complaints. Invaluable for parturition in Mares, Cows, and Ewes.

3s. 6d. per Bottle; 1-dozen Box, 10s. 6d.

**THE RED PASTE BALLS and RED POWDERS.**For ill-conditioned Horses and Colts; invaluable after hard hunting or  
driving. For coughs, colds, staring coat, itching, swollen legs and want of  
strength. The powder given in the feed will produce fine appetite and tone.

7s. 6d. per dozen; 3-dozen Box, 21s.

**THE BLACK PHYSIC BALLS.**These Balls are matchless for thoroughly cleansing the system of all im-  
purities, and for assisting in the expulsion of Worms. Their purgative  
action soon relieves Costiveness of the Bowels, and checks all Feverish  
Symptoms arising from gross habit.

Price, 8s. per dozen; Box containing 3 dozen, 23s.

**THE BRONCHOLINE.**The great and reliable remedy for Husk or Hoarse in Cattle, Heifers  
Calves, and Sheep. Its gaseous odour destroys the worm or parasite in the  
windpipe, removes the hard cough, and soothes the lungs and other organs.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

**THE "KEY TO FARRIERY."**A small work published by us on the general ailments of stock, their  
treatment and cure.

Large Edition, in Cloth, 2s. 6d.; Small Edition, 1s.

The Stockbreeder's Medicine Chest.	No. 1 contains a complete assortment of all our preparations for treating diseases of stock generally,	Price £6 6 0
The Stockbreeder's Medicine Chest.	No. 2 is suitable for ordinary Farm use, and contains a useful selection of the above Medicines	2 16 6
The Horsekeeper's Medicine Chest.	No. 3 is arranged for large Horse Owners, Collieries, &c., and contains 12 specially selected Medicines	5 5 0
The Horsekeeper's Medicine Chest.	No. 4 contains a smaller assortment, but has everything requisite for all ordinary ailments in Horses	2 17 6

Prepared only by **DAY, SON & HEWITT, 22 DORSET STREET, LONDON, W.**

LIBERAL DISCOUNT TO FOREIGN BUYERS.

LIST AND PARTICULARS OF AGENTS ON APPLICATION.



# FOR ALL CANINE AILMENTS. SPRATTS PATENT, LIMITED, DOG MEDICINES.

*Pamphlets on Canine Diseases for gratuitous distribution. Show Cards and Handbills Supplied.*

Address: **SPRATTS PATENT, LIMITED, LONDON, S.E.**

SPRATTS PATENT (AMERICA) LIMITED, 239 to 245 East 56th Street, NEW YORK, U.S.A.

OR YOUR WHOLESALE HOUSE.

## BATTLE'S VERMIN KILLER. { Mice eat it readily and Die on the spot.

TRADE MARK.



Has an immense Sale, and wherever introduced never fails to give satisfaction.—Mice appear attracted to it as by magic, eat it readily, tumble over, and die on the spot. Rats usually die in their runs.—Parties troubled with Vermin may be cleared at once, either from Stacks, Houses, or Ships.

**TESTIMONIALS.**—Thousands might be published.

From Mr. THOMAS COLTON, Agent for Selby.—A friend of mine purchased a Packet of your VERMIN KILLER last night, doubting its efficacy to-day he called in to say that he had found fifteen dead mice, and had only used part of a packet.—From Mr. EDWARD STURDY, Flemington Mills.—I only received by post the Packet of your VERMIN KILLER, and found it as represented in your advertisement. It speedily destroyed all the mice in my granary. I enclose 2s. for two more Packets.—Leeds, November 6th, 1887.—I have tried BATTLE'S VERMIN KILLER, and have found it most effectual in clearing my premises of LARGE QUANTITIES OF RATS.—THOMAS S. CROSLAND.—Mr. Stead.

Sold in Packets, 3d., 6d., and 1s. each.

SOLE PROPRIETOR.

**Mr. J. R. BATTLE, Chemist, Lincoln, England.**

*No Chemist or Storekeeper should be without a supply.*

ESTABLISHED  
1840.

# DAY & SONS'

AWARDED  
40  
PRIZE  
MEDALS.

## WORLD-FAMED HORSE & CATTLE MEDICINES.



**DIRECTIONS FOR USE**  
FOR Colic or Gripes in Horses and Cattle.  
FOR Debility and Chills in all Stock.  
FOR Scour in Calves and Lambs.  
FOR Hoven or Blown Cattle and Sheep.  
FOR Shivering Fits in Horses.  
FOR Weakness after Lambing or Calving.

PRICE—10/ PER HALF-DOZEN, OR 19/ PER DOZEN.



FOR Fevers, Yellows, Indigestion, and Dulness  
FOR Red Water, Costiveness, and Mawbound.  
FOR Disordered System in Cattle.  
FOR Bad Cleansing after Calving.  
FOR Preventing Milk Fever and Inflammation.  
FOR Purifying and Increasing the Milk.

PRICE—12/ PER DOZEN PACKETS.



FOR Healing all Wounds in all Animals.  
FOR Kicks, Stike Wounds, Broken Knees in Horses.  
FOR Cracked Heels and Saddle Galls in Horses.  
FOR Sore Teats and Swollen Udders in Cows and Ewes.  
FOR Dressing and Anointing in Lambing and Calving.  
FOR Every Horse-keeper, Farmer, and Shepherd.

PRICE—2/6 PER BOTTLE.



FOR Ill Condition, Off Appetite, Disordered System.  
FOR Heat-lumps, Itching, and Sourvy Skin.  
FOR Hidebound, Bad Water, and Blood Ailments.  
FOR Coughs, Colics, Sore Throats, and Fevers in Horses.

IN CANISTERS.

PRICE—3/6 7/ 12/ AND 25/.

THE "ORIGINAL" UNIVERSAL MEDICINE CHESTS, £2 4s. and £5. FOR ALL DISORDERS OF HORSES, CATTLE, CALVES, SHEEP, AND LAMBS.

Only Prepared by the Inventors, **DAY & SONS, CREWE, CHESHIRE.**

May be obtained of Sanger & Sons; Evans, Lescher & Webb; Barclay & Sons; Burgoyne, Burbidges & Co., &c., London; Evans, Sons & Co., Liverpool, &c. Exporters are invited to apply for terms. Liberal Discount offered.



**HORN & SON.**

OFFICES FOR BRITISH AND FOREIGN

**PATENTS AND TRADE MARKS,****SOMERSET CHAMBERS, 151 STRAND, LONDON**  
(NEXT TO SOMERSET HOUSE).*Guide to New Patent Law and Registration gratis.***FOUND DEAD**

BY SANFORD'S RAT POISON.

"I have found 145 rats killed in my farm buildings by it."—C. Wilson Offord.  
 "It is the most certain remedy I have ever tried. Little pellets about the size of a pea are put in the rat holes or in their runs. I destroyed over 200 rats from one dressing with it."—G. Cook, Grange Farm, Ellesmere, Salop. It is, without doubt, the best ever introduced. Price 6d., 1s., 2s., and 3s., of Chemists.  
 SANFORD'S MICE POISON for Houses, Buildings, Corn Stacks, &c. Cannot be excelled. Has given entire satisfaction for the past 23 years. In packets 3d., 6d., 1s., and 2s. each, with directions for use, of SANFORD & SON, Sandy, Beds. Liberal terms to Chemists. Wholesale of Barclay & Son, Sanger & Son, Newbery & Sons, Edwards, and others, London (England).

**PURE WHITE BEESWAX**

Guaranteed pure, of the best quality, in blocks, cakes, or other forms. Candles, and all other articles manufactured of Beeswax, at the lowest possible prices.

QUOTATIONS FREE ON BOARD HAMBURG AND OTHER PORT

**Lüneburger Wachsbleiche Wax Bleaching Works,**  
LUNEBURG (GERMANY).**HAND-PICKED GUM ARABIC.**

Wholesale and Export Druggists before buying elsewhere should apply to

**FREDK. FINK & CO.**

10 &amp; 11 MINCING LANE, LONDON, E.C.

TO LET.

**Critchley's Starch Gloss**

Makes Starched Linen like new. Does not stick to spider-like Materials. Once tried always wanted. Used in the Royal Lardries. Sold everywhere, in Packets, 1d., 3d., 6d., and 1s. each. Write for quotations.

Prepared only  
by  
**T. CRITCHLEY,**  
BLACKBURN, and  
1 & 1 Australian Avenue,  
LONDON, E.C.

**J. BEACH & SONS,**

WILLOW WALK, BERMONDSEY, LONDON, S.E.

MANUFACTURERS OF

**PLAISTER SKINS and****WHITE SPLIT SKINS for Capping,**

WHOLESALE AND FOR EXPORTATION.

For ASTHMA, CONSUMPTION, COUGHS, COLPS, BRONCHITIS,  
THROAT AFFECTIONS, SHORTNESS OF BREATH, and all  
DISORDERS OF THE CHEST



Give immediate relief.

Prepared only by DASILVA & CO., 26 Bride Lane, Fleet Street LONDON.  
Sold by all Druggists at 1/12, 2/9, 4/6, and 11/ per box.

**ORANGE WINE**

(VIN. AURANT., F.B.)

Specially brewed for Quinine Wine, does not deposit. Is well adapted for Export, as it will keep good in any climate. In casks, 13, 27, 56, 112, 140 gallons; small casks 3s. 9d. per gallon, carriage allowed. In wine bottles (not less than 3 doz.), at 9s. per doz., including bottles. Cases extra and returnable.  
Sample six stamps. Special quotations to large buyers.

**GEO. DURRANT & CO., Hertford.****S.V.R.**

In 40-gallon returnable iron casks, pure tinned, with screw bungs, interchangeable brass taps and spanners for opening. Farina, Dextrin, Glucose, Alcohol absolut, Fusel Oil, Pear Oil, Lime-Soda-Lead-Acetates, Verdigris, Acetic Acid, Wood Naphtha, Charcoal, Ammonia liquid 880-900, anhydrous, Sodium Sulphide Nitrite 96/98 %, Bromides, Iodides, Chloralhydrate, Boracic Acid, Sulphate of Copper, Permanganate of Potash, Ol. Caryophyll., Menth. Pip., Pini, Juniperi.

**HUGO LORENZ, 7, 8 Idol Lane, LONDON, E.C.****PERFUMERY****J. N. TAYLOR, Manufacturer,**

67 MORTIMER STREET, REGENT STREET, LONDON, W.

**MOUILLA LIQUID SOAP**

The invention of Dr. DUNCAN, St. Petersburg.  
Beautifully Transparent Golden Colour. Delicately Perfumed.  
As prescribed by most eminent Skin Physicians.—See Testimonials.  
In handsome bottles with sprinkler tops. Retail, 6d. and 1/6 per bottle. Wholesale terms on application to  
The Mouilla Liquid Soap Co., Ltd., 6 Adam St., Strand, W.C.

**EMP. BELLADONNA.**

ON SWANSDOWN, 16 IN. WIDE.

17s. per Doz. net cash.

**JOHN QUILLIAM & CO.,** Plaster Works, Manchester.  
Cowburn Street, [3]**THE ALOFAS REMEDIES**

TINCTURES, PILLS, OINTMENTS, EMBROCATION, ETC.

LIBERAL TERMS TO CHEMISTS. Write for Pamphlet and Circular sent post free.

**THE ALOFAS COMPANY,** Central Depot, 20 New Oxford Street, LONDON, W.C.**Dunn's**

(Healthful, Useful.)

Certificate of **Fruit-Salt**  
Analysis on each tin.

Manufactured by  
**W. G. DUNN & CO.**  
21 Mincing Lane, E.C.

**Baking Powder****"THE COOK'S BEST FRIEND."**

Works—Croydon, Surrey.

Price List and Sample on application.

Send 12 stamps for sample dozen of 3d. Sticks of White Gutta Percha Tooth Stopping.

**BEST GUTTA PERCHA OR METALLIC****TOOTH STOPPINGS**Are Manufactured by **J. J. LAKEMAN, Dentist, LEYTONSTONE.**

Special Terms to Wholesale Buyers.

Maker of the **MERMAID IMPRESSION COMPOSITION** for Dentists  
use. 3s. per lb., post free.



**AVOID RISK of CHILLS in the BATH by USING**

# RANKIN'S CORK BATH MATS.

MAKES THE BEST CARRIAGE MAT.

OF ALL CHEMISTS AND DRUGGISTS.

A Real Comfort. Recommended by Medical Men.

**CAUTION.**—Please note these Mats are of solid Corkwood, which, being a non-conductor, is warmer than any other material to step on from the bath.

Valuable show-cards supplied to Retailers with first order, and with all Mats an equal number of fine thin Cards of Cork printed with illustrated advertisement. These Cards are a great novelty, and their free distribution will be found to assist sales materially.

**PRICES.**—3/6, 5/6, and 7/6 each, free; extra sizes, 10/6, 12/6, and 15/6 each, super quality and finish.

**WM. RANKIN & SONS, 10 CARLTON PLACE, GLASGOW.**

Wholesale Chemists' Agents—S. MAW, SON & THOMPSON.



PERFUMED THE BREATH STRENGTHENS THE GUMS  
WHITENS & PRESERVES THE TEETH  
A LADY'S REQUISITE  
ABOUT TO SMOKERS.  
ENTIRELY FREE FROM ANY  
DELETERIOUS INGREDIENTS  
SOLE PROPRIETORS  
THE KENNEDY COY. 2, FALCON ST. LONDON, E.C.

AND OF ALL

WHOLESALE

DRUGGISTS.

**ST. DALMAS' LEICESTER**

**Improved Adhesive Plaster**

ON FINE FLESH COLORED CAMBRIC

USED BY SURGEONS ALL  
OVER THE WORLD.

In ONE WEEK three curious uses were reported for which

**"THE LEICESTER" IMPROVED ADHESIVE PLASTER,**

*On Fine Flesh-coloured Cambric,*

is found the best, after trying other makes (in the first case, nearly every known plaster). A well-known actor said he had the good fortune to meet with it in the South of England, and had inquired for it wherever he went since. It is the only plaster he can find to answer for fixing false hair, &c. A chemist in the North wrote and said a lady violinist would have nothing else; she uses it to make a pad to protect her fingers. A chemist in Yorkshire has a customer who uses plaster to keep his eyes open, and nothing will hold the lids up so well as "The Leicester" Improved Adhesive Plaster on Fine Flesh-coloured Cambric. Surgeons in all parts are frequently commending it. The Sale rapidly increases.

**DR. JOHN FRANCIS CHURCHILL'S INHALANT**

TRADE MARK



REGISTERED.

# "SPIRONE"

TRADE MARK.

FOR THE TREATMENT AND CURE OF ALL

**DISEASES OF THE LUNGS, WINDPIPE, NOSE, AND THROAT,**

Claims to be a Specific for all Congestive and Inflammatory conditions of the Respiratory Apparatus, and will be found efficacious in

**COUGHS AND COLDS, ASTHMA, BRONCHITIS,**

Inflammation and Congestion of the Lungs, Pneumonia, Pleurisy, Whooping Cough, Croup, Diphtheria, Pharyngitis, Laryngitis, Catarrh, Sore Throat, Quinsy, Enlarged Tonsils, Hoarseness, Loss of Voice, Colds in the Head, Hay Fever, and all other Complaints of the Respiratory Organs.

**PREPARED ONLY BY THE INVENTOR.**

None Genuine except such as bears the above Trade Mark "SPIRONE" and the Signature of the Inventor upon the Bottle on the Label over the Cork, and on the Wrapper,

**JOHN FRANCIS CHURCHILL, M.D. (Paris),**

The Discoverer of the Specific Cure for Consumption, and of the Medicinal Properties of the Hypophosphites

**Price 4s. 6d. and 11s. per Bottle.**

SET OF APPARATUS FOR ADMINISTRATION, 15/. PAMPHLETS AND SHOWCARDS FREE ON APPLICATION.

**THE SPIRONE COMPANY, Lim., Depot—17A Duke St., Manchester Square, LONDON, W.**



# To the Export Trade.

WE extend special facilities to all the Foreign Wholesale Houses who handle our goods. We prepare a "Vinolia" for Export, put up with direct regard to the exigencies of hot climates, transportation, &c. To avoid mistakes, all "Vinolia" which is designed for foreign trade is stamped with the words "**for Export only.**" Unless the Wholesale Houses bear this in mind, "Vinolia," as ordinarily put up, may be sent out, with consequent disappointment and dissatisfaction to the buyer.

In order to give the Foreign Houses every encouragement and facility to push our goods, and always have a goodly amount on hand, we undertake to supply "Vinolia" preparations in any quantity to the Foreign Trade **at Special Terms.**

We are now spending considerable sums of money in advertising in foreign countries with very satisfactory results, both to the trade and ourselves, and an ever-growing demand for our goods. We would therefore suggest to all the Foreign Houses that they look to it that they keep a good supply of "Vinolia" preparations in stock, as those who always have them on hand will be most likely to reap the largest share of the returns. Our experience has been that those who have our preparations first do the best in them.

All the leading houses in this country have had as much pleasure and profit out of handling "Vinolia" as out of any of the products introduced in recent times, as they are the embodiment of the highest perfection in Pharmaceutical Art. Warmest expressions of admiration, favour, and good report reach us daily from both Medical Men and the Trade. It seems only reasonable for us to promise that as our products have been found so indispensable, satisfactory, and generally profitable to the trade in this country, they will prove likewise if taken up with interest abroad.

We are always desirous to co-operate with the trade in every possible way. With this regard we supply most artistic and costly show cards, and literature of the highest class it is possible for us to produce. Our pamphlets are all issued in a unique form, and their execution alone, to say nothing of their superior body matter, is most creditable to those distributing them. Literature can be obtained from us in any quantities desired.

Our goods are handled by all the prominent houses of foreign countries, among whom may be mentioned the following firms:—

ROCKE, TOMPSITT & CO., Melbourne.  
GRIMWADE, RIDLEY & CO., Brisbane and  
Sydney.  
SHARLAND & CO., New Zealand.  
LENNON & CO., Port Elizabeth, South  
Africa.  
KUNTZEN & CO., Brazil.

H. NATHAN & CO., Australia.  
ROBERTS & CO., Rue de la Paix, Paris.  
KEMP & CO., Bombay.  
BATHGATE & CO., Calcutta.  
EVANS, LESCHER & WEBB, Spain.  
CASWEN, MASSEY & CO., New York.  
NEIL S. CAMPBELL, Colombo, Ceylon.

Prices:—"VINOLIA," 1s. 9d., 3s. 6d., and 6s. per Box; "VINOLIA" POWDER, 1s. 9d., 3s. 6d., and 6s. per Box; "VINOLIA" TOILET SOAP, 2s. 6d. per Box of Three Tablets; "VINOLIA" MEDICAL SOAP, 2s. per Box of Three Tablets; "VINOLIA" SHAVING SOAP, 2s. and 3s. 6d. per stick.

**BLONDEAU & CIE., London, Paris, and New York.**  
English Dépôt—Ryland Road, London, N.W.